Air University Research Bulletin Spring 2004

Inside this Issue:

**AU Schools** 

# Selected Research **Accomplishments from**

AU	Research	Bulletin
	Ovorvio	NA/

- **School of Advanced Air** and Space Studies
- Air War College

3

5

- **USAF Counter-**8 proliferation Center
- Center for Strategy and 9 Technology
- Air Command & Staff 10 College
- 14 AF Fellows Colloquium
- **CADRE's Airpower** 15 **Research Institute**
- **Research and Publication Opportunities**
- 21 2003 Research at Maxwell

**OPR:** Lt Col Bruce Shapiro CADRE Airpower Research Institute 401 Chennault Circle Maxwell AFB, AL 36112 Research.Support@maxwell.af.mil

## Air University Commander's Welcome

By Lt Gen Don Lamontagne

The mission of Air University is to provide the full spectrum of Air Force education, from pre-commissioning to the highest levels of professional military education (PME), including degree granting and professional continuing education (PCE) for officers, enlisted, and civilian personnel throughout their careers. The university's PME programs educate Airmen on the capabilities of air and space power and its role in national security. These programs focus on the knowledge and abilities needed to develop, employ, command, and support air and space power at the highest levels. Specialized PCE programs provide scientific, technological, managerial, and other professional expertise to meet the needs of the Air Force. Air University conducts relevant, responsive, and forward thinking research in air and space power, leadership, and management.

Each year I send a call for topics letter to senior leaders within the Department of Defense (DOD), Air Force, MAJCOM's, combatant commanders and sister services requesting topics of interest for them, their commands and the national security community as a whole. Last year, we received over 390 topics in response to our call.

In this, the fourth edition of the Air University Research Bulletin, I am pleased to report we have collected and published over 150 research papers produced in 2003 by students attending our three Maxwell-based graduate schools—the Air Command and Staff College (ACSC), the Air War College (AWC), and the School of Advanced Air and Space Studies (SAASS). Also included in this collection of outstanding student papers are research studies completed in 2003 by officers participating in our various Air Force

Fellows programs at leading civilian universities and think tanks.

The Research Bulletin also highlights contributions in the area of research conducted by our military and civilian faculty at ACSC, AWC, SAASS and the College of Aerospace, Doctrine, Research and Education (CADRE).

The research support team at CADRE posts student papers and publications to the AU Research Web. In order to serve the community better a SIPRNET site has been set up at

http://research.maxwell.af.smil.mil/. This site allows the immediate posting of papers given to us by the schools. Once the papers have cleared a security review, they are posted to the normal research web site. I encourage you to visit the site. The archive contains over 2,600 research studies consisting of papers, monographs and books—the best of AU research!

#### AU Research Web

(https://research.au.af.mil)

AU Research Web offers a comprehensive approach to ePublishing that integrates with the time-honored missions and methods of the US Air Force. Our vision is one of enhancing the role of Research and supporting our crucial role in serving millions of people every day who seek information.

## Air University Research Bulletin

#### AIR UNIVERSITY RESEARCH CONTACTS



Gen John A. Shaud, (Retired) AU Dean of Research College of Aerospace Doctrine, Research and Education (CADRE)

Research.Support@maxwell.af.mil



Colonel Dale Hayden Director, Airpower Research Institute College of Aerospace Doctrine, Research and Education (CADRE)

Dale.Hayden@maxwell.af.mil



Lt Col Edward Westermann Director, Student Research School of Advanced Air and Space Studies Edward.Westerman@maxwell.af.mil

Dr. David Sorenson Associate Dean for Academic Programs Air War College (AWC) David.Sorenson@maxwell.af.mil



Lt Col Fred Warren Director, Student Research Program Air Command & Staff College (ACSC) Fred.Warren@maxwell.af.mil



Ms. M. Dee Taylor Chief, Air Force Fellows College of Aerospace Doctrine, Research and Education (CADRE) Dee.Taylor@maxwell.af.mil



Col (sel) John Geis Director, AU Center for Strategy and Technology (CSAT) John.Geis@maxwell.af.mil



Dr. Barry Schneider Director, USAF Counterproliferation Center (CPC) Barry.Schneider@maxwell.af.mil



Lt Col Bruce Shapiro Chief, Research Support College of Aerospace Doctrine, Research and Education (CADRE) Research.Support@maxwell.af.mil

The AU Research Bulletin is distributed throughout the national security community in print form and is also available electronically at https://research.au.af.mil or http://research.airuniv.edu. This Bulletin is produced by the College of Aerospace Doctrine, Research and Education, Air University, Maxwell Air Force Base, Alabama.

#### AU COMMAND RESEARCH ADVISORY BOARD



Vacant CJCS Chair to AU



Colonel Stephen Cullen Vice Commander Air Force Doctrine Center Stephen.Cullen@doctrine.af.mil



Colonel Dennis Rea Combat Air Forces Chair to AU Dennis.Rea@maxwell.af.mil



Colonel Steven Jones Air Force Materiel Command Chair to AU Steven.Jones@maxwell.af.mil



Colonel Scott Phillips Air Mobility Command Chair to AU Scott.Phillips@maxwell.af.mil



Colonel James Lee Air Force Space Command Chair to AU James.Lee@maxwell.af.mil



Colonel John Jogerst Special Operations Command Chair to AU John.Jogerst@maxwell.af.mil



Colonel Michael Ainscough Air Force Surgeon General Chair to AU Michael.Ainscough@mawell af.mil



Colonel David Bearden Air Force Reserve Advisor to AU David.Bearden@maxwell.af.mil



Colonel Mike Ritz Air National Guard Advisor to AU Mike.Ritz@maxwell.af.mil

#### Editorial staff:

Colonel Dale Hayden, Co-editor Lt Col Bruce Shapiro, Co-editor Mr. LaDon Herring, Associate Editor Ms. Catherine Parker, Associate Editor

Disclaimer: Opinions, conclusions, and recommendations expressed or implied within are solely those of the authors and do not necessarily represent the views of Air University, the United States Air Force, the Department of Defense, or any other US government agency. Cleared for public release: distribution unlimited.

#### **AU Research Bulletin Overview**

#### Research at AU

By John A. Shaud, General (Ret), AU Dean of Research

AU sponsors a variety of research programs. Our primary objective in publishing the annual *AU Research Bulletin* is to recognize the research accomplishments of AU faculty and students. Accordingly, we highlight faculty and student research, the latest AU Press publications, and the activities of AU's specialized research centers.

The AU Research Bulletin records faculty and student participation in conference and other professional activities that extend our knowledge in the core areas of the AU curriculum. The Bulletin tries to foster communication about a broad range of matters related to research at AU. The Bulletin is designed to help promote increased recognition of an important dimension of AU's service to the Air Force and the wider defense community.

The services and tools offered by the AU Library, the Air Force Doctrine Center (AFDC), the Air Force Historical Research Agency (AFHRA), and CADRE's Research Support Division contribute to the process of scholarly investigation at Maxwell. Accordingly, the *Bulletin* will also report on noteworthy developments in the vital area of research support.

We welcome your thoughts on ways to improve the *AU Research Bulletin*. Please send any comments to Research.Support@au.af.mil

#### **Research Programs at AU**

By Lt Col Bruce Shapiro, Chief, CADRE's AU Research Support Division

Research at AU includes both technological research undertaken primarily at AFIT at Wright-Patterson Air Force Base (AFB) in Dayton, Ohio, and research on doctrine, strategy, and the art of war conducted at the schools at Maxwell AFB, Alabama: AWC, ACSC, SAASS and AF Fellows.

AFIT's research program is supervised by Dr. Heidi Ries, Associate Dean for Research, Graduate School of Engineering and Management (AFIT/EN), Heidi.Ries@afit.edu. Research accomplishments from AFIT are featured in the new *AFIT Research News* publication—a color newsletter to be published three times per year. Browse to <a href="https://www.afit.edu/enr">www.afit.edu/enr</a> for an online copy. AFIT theses and dissertations are available on the AU Research Web.

Top Domain/Users of the Research Web	Visitations
af.mil	17,038
googlebot.com	4,513
aol.com	2,309
rr.com	1,394
army.mil	1,263
cox.net	1,221
navy.mil	989
comcast.net	980
attbi.com	725
Level3.net	646
bellsouth.net	452
verizon.net	445
adelphia.net	442
mindspring.com	434
knology.net	418
pacbell.net	372
charter.com	366
boeing.com	364
Imco.com	351
Others	113,262
Total	147,984

# **AU Research Bulletin Overview**

During 2003 Research Web site served up 169,707 PDF files for our research community. Below are the top 20 papers downloaded during the year.

		Top 20 Downloaded Files for 2003	
	School / Year	Title / Author	Downloaded
1.	Air War College 2001	Death by a Thousand Cuts: Micro-Air Vehicles (MAV) in the Service of Air Force Missions Arthur F. Huber II	838
2.	Air Command & Staff College 2001	Operation Fortitude: The Closed Loop D-Day Deception Plan Ernest Tavares	802
3.	Air Command & Staff College 2000	Robotics: Military Applications for Special Operations Forces George M. Pierce II	610
4.	Air Command & Staff College 2001	Past UAV Program Failures and Implications for Current UAV Programs Barak J. Carlson	598
5.	Air Command & Staff College 2001	UAVs and ISR Sensor Technology Jeffrey T. Butler	547
6.	Air Force Institute of Technology 2002	Analysis of Ultra Wide Band (UWB) Technology for an Indoor Geolocation and Physiological Monitoring System Cengiz Alabacak	485
7.	School for Advanced Air and Space Studies 2001	The Limits of Decentralized Execution: The Effects of Technology on a Central Airpower Tenet Mustafa R. Koprucu	461
8.	CADRE Paper no. 12	The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs (No. 12) David R. Mets	418
9.	Air Command & Staff College 2001	HOMA: Israel's National Missile Defense Strategy (Abridged Version) Guermantes E. Lailari	386
10.	School for Advanced Air and Space Studies 2002	Foie Gras and Ketchup: Understanding Differences and Improving Military Cooperation with the French Scott K. Gibson III	384
11.	Air Force Institute of Technology 2000	Design and Validation of an Accurate GPS Signal and Receiver Truth Model for Comparing Advanced Receiver Processing Techniques Phillip Martin Corbell	361
12.	School for Advanced Air and Space Studies 1993	Rethinking the Air Operations Center J. Taylor Sink	358
13.	AF Counterproliferation Center (CPC) Paper no. 8	Deterring Lybia the Strategic Culture of Muammar Qaddafi (No. 8) Craig R. Black	352
14.	Air Command & Staff College 2001	Weapons of Mass Destruction—Civil Support Teams (WMD-CST): A Necessary Failure Larry Walker	349
15.	Air Command & Staff College 2001	The B-2A and 500 Pound JDAM: A New Concept of Mass Steven L. Basham	336
16.	Air Force Institute of Technology 2002	Design Study of Triggered Isomer Heat Exchanger-Combustion Hybrid Jet Engine for High Altitude Flight Christopher E. Hamilton	322
17.	School for Advanced Air and Space Studies 2001	Effects-based Targeting: Another Empty Promise? T. W. Beagle, Jr.	276
18.	Air Force Institute of Technology 2001	Revising R&D Program Budgets When Considering Funding Curtailment with a Weibull Model Paul H. Porter	219
19.	Air Force Institute of Technology 2001	An Analysis of the Computer and Network Attack Taxonomy Richard C. Daigle	218
20.	Air Force Institute of Technology 1999	A Constructive Induction Approach to Computer Immunology Kelley J. Cardinale, Hugh M. O'Donnell	209

#### **Research and Publications**



# School of Advanced Air and Space Studies (SAASS)

# 2003 Research SAASS Thesis Studies Available On-line

By Lt Col Edward B. Westermann, Professor of Military History

SAASS students produce some of the finest research studies at Maxwell. Each student produces a research thesis addressing an important military issue—either of historical or contemporary importance. Approximately half of these theses are accepted for publication in professional *Journals* or in the SAASS theses series or the *CADRE Papers* series produced by AU Press.

SAASS theses studies from 1992 through 2003 are available on the AU Research Web in full text. Instructions for accessing this site are on the front cover of this *Bulletin*.

#### **Faculty Highlights**

During 2003, the SAASS faculty has continued its tradition of research, publication, and special presentations on a wide variety of national defense issues, centered primarily on air and space power. The faculty has also taken a direct role in supporting U.S. military operations with two faculty members deployed during 2003, including the Commandant, Colonel Thomas E. Griffith, Jr.

**Dr. Harold R. Winton** continued his study of American corps commanders in the Ardennes offensive of 1944-45 with his presentation to the New York Military Affairs Society, "Major General John Millikin and III Corps in the Relief of Bastogne: A Preliminary Assessment." At the invitation of the Rowell Advanced Warfighting Seminar, Land Warfare Studies Centre, Canberra, Australia, he delivered a paper, "The Creation and Sustainment of Advanced Warfighting Institutions." This presentation provided insights for the Australian army derived from the formation and early years of the U.S. Army School of Advanced Military Studies, the USAF School of Advanced Air and Space Studies, the USMC School of Advanced Warfighting, and the British Army's Higher Command and Staff College. Finally, he made a presentation titled, "Leadership in a Time of Transition: Developing a Genius for Change" to the Cavalry Leadership Symposium, Fort Knox, Kentucky. This presentation used evidence from the two decades between World Wars I and II and from the American armed forces in the post-Vietnam era to argue that every military professional must develop a "genius for change" as part of his or her total leadership persona.

**Professor Dennis Drew** published "The Road to Academic Critical Mass" in the June 2003 edition of *Militaire Spectator*,

the joint professional journal of The Netherlands' Air Force and Army. The article discussed the impact of special indepth education conducted at SAASS for selected RNLAF officers in preparation for instructional duties at the RNLAF War and Staff College. He also delivered a paper entitled "Airpower at 100: Essence, Reality, and Dilemma" at the USAFA 20th Military History Symposium. This paper traced the development of airpower focusing on three threads: technology, experience, and theory. Additionally, he completed a book manuscript (with co-author Donald M. Snow at the University of Alabama) for Brassey's, working title *National Security Strategy Making*, which is scheduled for publication in September 2004, an updated edition of the authors' *Making Strategy* published in 1988 by Air University Press.

**Dr. David Mets** is slated to transition to emeritus status in July 2004. He co-edited and was a contributor to *Plotting a* True Course (Praeger, 2003). His article "Not So Forgotten War," on Korea appeared in the winter 2003-04 issue of *The Air and Space Power Journal*. He delivered the Exemplar Lecture for the Class of 2006 at the Air Force Academy on General Carl Spaatz and gave a similar talk to a leadership symposium at the George Bush School at Texas A & M the same month. He presented a paper on the Battle of the Bismarck Sea at the 2003 meeting of the Society for Military History in Knoxville in May. His article on the same subject appeared in Military History Quarterly. Dr. Mets also presented his lecture on the history of the USAF to the students at the Canadian Forces College in January, 2003 and again in January 2004. His article "Boydmania" has been accepted for publication in the Air and Space Power Journal and is scheduled for the summer 2004 issue.

Dr. James Corum with former SAASS faculty member, Dr. Wray Johnson, published Airpower in Small Wars (University Press of Kansas, 2003). This work provides a comprehensive history of airpower in small wars from the French in Morocco in 1925 to Afghanistan 2001. He also published a book chapter "The Luftwaffe and Lessons Learned in the Spanish Civil War" in Air Power History: From Kitty Hawk to Kosovo, (ed.) Sebastian Cox, (Frank Cass, London, 2003) and the following articles "Starting from Scratch: The Luftstreitkraefte Builds a Bomber Doctrine, 1914-1918" in RAF Air Power Review and "Establishing the Bundesluftwaffe as a Modern Air Force, 1955-1960" in Air Power History. His presentations included "To Stop Them on the Beaches': The Luftwaffe's Campaign Against the Allied Landings in Italy" delivered at the Society for Military History conference in Knoxville; "The Future of Airpower in Small Wars" presented at the Aerospace Power conference, Winnipeg, Canada; and a talk on Airpower and Small Wars given at the Heritage Foundation, Washington D.C. As part of a nine-man team drawn from the senior service schools he contributed in developing a long-term strategy to build a new Iraqi Armed Forces, an effort that included a TDY to Baghdad.

**Colonel Thomas Ehrhard** appeared in a NOVA special entitled "Spies That Fly" concerning the evolution of unmanned aerial vehicles and their use in Operation Enduring

#### **Research and Publications**

Freedom. He presented a paper "Manning the Unmanned: Creating a UAV Career Field" at a UAV conference as well as a paper entitled "Transformation: An Air Force Perspective" at Georgetown University. In addition, he submitted a chapter entitled "Seeds of a Revolution: Maritime UAVs in the 1960s" for a forthcoming book Providing the Means of War: Historical Perspectives on Defense Acquisition, 1945-2000. During this period, he also served as the Global Environment, Threat, and Military Strategy Panel chairman for the Air Force's Air Armaments Summit tasked with setting the strategic direction for future air armaments acquisition. He served on the Air Force and Joint Strategic Attack doctrinal publication committee which laid out the doctrinal tenets for Strategic Attack as a Joint mission. He continues to participate on a special study group considering a long-range strategy for the Global War on Terror commissioned by the Secretary of Defense's Office of Net Assessment. He also gave a number of briefings and presentations, including a briefing to a Secretary of Defense's strategy group concerning the use of the term "dissuasion," a briefing concerning land basing changes to the Secretary of Defense's global basing posture initiative emphasizing the importance of the Air Force's Air and Space Expeditionary Force (AEF) concept to our evolving strategy in the Pacific, a lecture to the Massachusetts Institute of Technology Innovation Seminar concerning Air Force perspectives on military innovation and its connection to contemporary defense transformation; a briefing to a Secretary of Defense-sponsored colloquium titled "Extending American Dominance," and a briefing to the College of Professional Development at Air University concerning senior officer perspectives on the AEF Concept.

**Dr. Thomas Hughes** joined the SAASS faculty from the Air War College in 2003. He continues research and writing on a biography of "Bull" Halsey. He delivered a paper "Halsey as a JFC Prototype" at the Society for Military History conference. He also presented sponsored talks, including "Professional Military Education in the USAF," SOCOM conference on Professional Military Education; "The USAF, 1945-1950," at the Royal Military College of Canada Biannual History Symposium; and "Strategic Attack Doctrine" at the Canadian Forces College. Additionally, he continues his work as Consulting Editor, Military History, *Encyclopedia Britannica*. Finally, he gave a lecture "Strategic Air Power in World War II" at the Air War College.

**Dr. Richard Andres'** current research focuses on the types of military coercion that are most effective against specific types of enemy regimes during wars. He presented his work on this subject in a number of forums and published "When to Target Enemy Heads of Government," in *World Defense Systems*. He has also been active in theoretical and practical research on "Wargaming the Effects of Transformational New Technologies" and has lectured on the subject around the country and published some of his results in "Wargaming the Revolution in Military Affairs, and Iraq" in *Fire & Movement*.

**Lt Col Edward Westermann** spent a 179-day deployment as a lead strategist with HQ USSOCOM's Campaign Support Group (CSG). His work included long-range strategic analysis

and campaign planning in evaluating and developing overarching strategies for the Global War on Terrorism. Two of his articles appeared as book chapters, including "Shaping the Police Soldier as an Instrument for Annihilation" in The Impact of Nazism, (ed.) Alan Steinweis and Daniel Rogers (University of Nebraska Press, 2003) and "The Most Unlikely of Allies: Hitler and Haile Selassie and the Defense of Ethiopia, 1935-36" in Girding for Battle, ed. Donald Stoker and Jonathan Grant (Praeger, 2003). He also published "Hitting the Mark, but Missing the Target: Luftwaffe Deception Operations, 1939-1945" in War in History, and an article dealing with German Decoy and Deception Operations to Degrade Allied Bombing Effectiveness in World War II." In addition, his article "'Ordinary Men' or 'Ideological Soldiers'?: Police Battalion 310 in Russia, 1942" was selected to appear in *The World War Two Reader*, (ed.) Gordon Martel (Routledge, 2004) and his "Ideology and Organizational Culture: Creating the Police Soldier" was selected for publication in Lessons and Legacies VII (Northwestern, 2004). He presented a paper at the German Studies Association conference in New Orleans dealing with German paramilitary constabulary operations in Poland and the Soviet Union during World War II and he continues work on a book manuscript concerning this subject for the University Press of Kansas. In support of his book effort, he received a research fellowship from the German Academic Exchange Service sponsoring two months of research in German archives in Ludwigsburg. Koblenz, and Berlin. During his stay in Germany, he was invited to present a lecture on his research at the University of Stuttgart.

Lt Col John Terino wrote a book review of Robert Coram's "Boyd: The Fighter Pilot who changed the Art of War" for the *Montgomery Advertiser*. He also managed the delivery of the Desert Storm Target Analyst Database for Air University, a database containing information on 1,600 targets, data for over 7,000 missions, 200 digitized weapons system videos, 1,000 target photographs, and information regarding 300 collateral damage incidents. The database is designed to serve as a tool for researching the genesis, conduct of, and impact of a modern air campaign for Air University students.

Lt Col Jon Kimminau joined the faculty in July and immediately set to work on a monograph tentatively titled "The Serious Warrior," this work attempts to lay out how military officers—particularly SAASS students—can gain a foundation for developing a professional military mind. It introduces how to think about military theory and history, what a warrior can learn from scholars, and a set of tools for lifelong learning and professional improvement. He drafted an article on USAF Force Development and PME which is under review by the *Air and Space Power Journal*. He also composed a thought piece on USAF policy and began work on a draft of an RC-135 reconnaissance handbook.

**Dr. Everett Carl Dolman** finished two books, including *The Warrior State: How Military Organization Determines*Political Institutions (Palgrave-MacMillan, forthcoming) which places military organization in the context of Western political development, arguing that structural changes in the

## **Research and Publications**

military precede and then determine political change. He also finished Pure Strategy: Power and Principle in the Space and Information Age (Frank Cass, forthcoming) which argues that the purpose of strategy is to develop or maintain a favorable continuation of events, as opposed to more traditional interpretations that tend to see strategy as a form of matching means to ends. He presented a number of papers, including "Astropolitics and Astropolitik," as part of the Air War College's Distinguished Speaker Series; "Space Leadership" presented at the "Century of Airpower Leadership: Past, Present, and Future" Symposium at the George H. Bush Presidential Library in College Station, Texas; "Astropolitik and the Outer Space Regime," presented to the Military Law Symposium, University of Alabama Law School, Tuscaloosa; "Inherent Assumptions in the Responsive Space Debate," presented at the First National Security and Military Space Workshop, Naval War College; "Law and Astropolitics," presented to the Montgomery Federalist Society; and Space and Information Power and Strategy," presented at the International Studies Association meeting in Portland. He also continues duties as the co-editor of the journal Astropolitics, the first independent, fully refereed academic journal dedicated to policy relevant inquiry into the political, economic, and military implications and uses of outer space.

#### **SAASS Students Make a Contribution to Research**

SAASS Students continue to make a contribution to the school's research efforts.

**Major William G. Eldridge** presented a paper entitled "Why Preemptive Counterproliferation Attack Works: Investigating Third Party Outcomes" at the International Studies Association in Montreal.

Major Jayson Altieri (USA) presented a paper on "Integrating UAVs with Joint CSAR Doctrine" at the 2004 Shepard's SAR conference held at Brighton, United Kingdom and the Air University' 2004 Air and Space conference held at Maxwell AFB, AL. His paper discussed the merits and issues involved in using UAV platforms to support and conduct Joint CSAR operations. In addition, he published "Sky Cops: New Approach for New Type of War" in the January 2004 issue of the Armed Forces Journal. "Sky Cops" addresses how the Air Force can use airpower to counter terrorism. He also continues to write book reviews for the Army's Armor magazine. His recent reviews of The New Face of War by Bruce Berkowitz and Wilson's Ghost by James Bright and Robert S. McNamara were published in Armor's winter editions.

SAASS theses produced by the class of 2003 are included in the summary at the end of this *Bulletin*.



### Air War College (AWC)

# Spring AY04 AWC Faculty Research Report

By Dr. David S. Sorenson, Associate Dean for Academic Programs

**Dr. Stephen F. Burgess** is conducting a project, *Emerging* Security Relationships and the Role of Political Islam in South Asia, May and September 2004, with a \$4,400 grant from the Institute of National Security Studies (INSS), U.S. Air Force Academy and a \$3,000 grant from the USAF Counter-Proliferation Center for field research in Pakistan and India. In May and September 2003, he conducted research in Washington, D.C. and India on "India's role in the U.S. missile defense posture and India and Pakistan in the arms control process." Dr. Burgess is co-author with Helen Purkitt of a book, forthcoming Spring 2005, South Africa and Weapons of Mass Destruction. Bloomington: Indiana University Press, and his book chapter, "The Chemical and Biological Warfare Program in South Africa," appeared in Barry Schneider and Jim Davis, (eds.) The War Next Time: Meeting the CBW Threat. Maxwell AFB, AL: USAF Counterproliferation Center in 2003. He also has a forthcoming book chapter in Fall 2004, "The Impact of Structural Adjustment and Economic Reform on the Transition Process in East Africa," in Paul J. Kaiser and F. Wafula Okumu, Democratic Transitions in East Africa: A Comparative and Regional Perspective (Ashgate). Forthcoming in Fall 2004 will be his monograph, *India's* Security Strategy, Missile Defense, and Arms Control, Institute of National Security Studies, USAF Academy. He is also participating (with other leading African security experts) in the Africa section of the Library of Congress Global Survey of Civil-Military Relations, May 2003-January 2004, Dr. Burgess presented the following conference papers: "Regional Hegemony and its Discontents: South Africa and India Compared," at the International Studies Association annual general meeting, Montreal, March 17-20, 2004; "Burden Sharing in Peace and Stability Operations by African Anchor States," at the African Studies Association annual general meeting, Boston, October 30-November 2, 2003; "Arms Control and Missile Defense in South Asia," Institute of National Security Studies (INSS) research results conference. USAF Academy, 13-14 November 2003; "Is Arms Control Really Dead? The United States, India, and Pakistan," 100<sup>th</sup> Annual Meeting of the American Political Science Association, Philadelphia, August 28-31, 2003.

**Dr. Mark Conversino** published "Should Deterrence Fail: Strategic Attack Theory and Planning in the Nuclear Era," in *Plotting A True Course: Reflections on USAF Strategic Attack Doctrine, The Post-World War II Experience.* Westport, CT: Praeger Publishers, 2003.

#### **Research and Publications**

**Dr. Christopher Hemmer** published "I Told You So: Syria, Oslo, and the Al-Aqsa Intifadah" *Middle East Policy*, Vol. 10, (Fall 2003): pp. 121-135. He also presented a paper at the International Studies Association entitled, "Unipolarity, the Lessons of September 11th, and the American Pendulum."

**Dr. Dan Henk** "What Do We Really Know About Senior Leadership?" at the annual meeting of the International Society for Political Psychology in Boston in May 2003.

Col John Geis published "Directed Energy Weapons on the Battlefield: A New Vision for 2025," CSAT Occasional Paper no. 32, April 2003, "UAVs in Perspective," Air Force Scientific Advisory Board Summer Study, June 2003. Col Geis and Lt Col Court Holmberg compiled articles for the Spring 2004 edition of the *Air and Space Power Journal*.

Dr. Mark Grandstaff published a book chapter, "To Make the Key Men for the Next Crisis: The Air War College and the Making of the Senior USAF Leadership, 1944-1993" in George Kennedy and Keith Neilson, Military Education: Past, Present, and Future, (Westport, Ct. Praeger, 2003), pp. 129-148, and a refereed article, "Visions of New Men": Masculinity and the Images of Soldiers in the Public Service Advertisements During World War II," in the Journal of Advertising and Society, (forthcoming), as well as conference papers, "The United States in the Great War: The New Zealand Connection," conference on New Zealanders in the Great War, Society for the Military History of New Zealand, Wellington, New Zealand, 8-11 November 2003, and "Visions of New Men": The Parsifal Motif and the Images of Soldiers in the Public Service Advertisements During World War II," third conference on War and Virtual War, Oxford University, 25 July 2003.

**Dr. Lawrence Grinter** presented papers at the International Studies Association/South, Gainesville FL, 18 October 2003, comparing "Taiwan and China: Cross-Strait Relations and The Korean Nuclear Crisis" and "Taiwan Debates the Future", Pacnet no. 48A, 23 November 2003, Pacific Forum, Honolulu.

**Colonel Michael Guillot** published "Strategic Leadership" in the *Air and Space Power Journal* Winter 2003 edition.

**Dr. Amit Gupta** has published "The Globalization of Cricket: The Rise of the Nonwest," *International Journal of the History of Sports*, Vol. 21, No. 2, March 2004, pp. 95-114. and republished in Boria Majumdar and James Mangan (eds.) *Sports and Society in South Asia*, (London: Frank Cass, 2004). He also published "Effects of the Conflict in Iraq, *Strategic Studies Institute Report*, U.S. Army War College, March 2003, pp. 1-12, and "India-Pakistan Relations: A Cold Peace?," *The Daily Times*, February 15, 2003.

**Col John Jogerst** has an article accepted for *Air and Space Power Journal* - "What Kind of War? Strategic Perspectives on The War on Terrorism."

Captain Edward Johnson (USN) has a multimedia presentation on unmanned undersea vehicles' role in littoral control and SLOC maintenance for the Submarine Technology Symposium 2004 at Johns Hopkins Applied Physics Laboratory in May 2004.

**Colonel Olin S. Key and Dr. Stephen Fought** published "Airpower, Jointness, and Transformation" in the Winter 2003 edition of *Air and Space Power Journal*.

**Dr. David Lai** published "A Referendum on Taiwan's Future: Not an Easy Exit." Issues & Insights, a publication of the Pacific Forum, Center for Strategic and International Studies, Vol. 3, No. 6, September 2003, "Football vs. Soccer: American Warfare in an Era of Unconventional Threats." Armed Forces Journal, Nov 2003, (co-authored with Joel Cassman of U.S. State Department), "Hu's in Charge?" WORLD Magazine, Special Report: China, September 6, 2003, Book chapter in The Economics of Conflict edited by Todd Sandler and Keith Hartley, (Northhampton, MA: Edward Elgar Publishers, 2003), Book chapter in The People's Liberation Army and China in Transition edited by Stephen J. Flanagan and Michael E. Marti (Washington, DC: National Defense University Press, 2003), and presented the following conference papers: "China's Political Transition and Strategic Policy" Institute for National Security Studies conference report: China's Nuclear Future, July 30-31, 2003, "The Great Power Dilemma: The Trade-off between Defense and Growth in Great Britain, 1830-1980." 2003 "U.S.-China Relations: A New Start?" Dr. Lai will also have "Learning from the Stones: A Go Approach to Mastering the China's Strategic Concept, Shi." Published in *Advancing Strategic Thought*, Army War College Strategic Studies Institute monograph, inaugurate issue, forthcoming.

**Dr. David Sorenson** published "The Dynamics of Political Dissent in Egypt," *Fletcher Forum of World Affairs*, Vol. 27 (Summer/Fall 2003), and presented "Confrontation Over Iraq: The United States vs. France and Germany: Was It the Great Trans-Atlantic Train Wreck," (co-authored), CEEISA/International Studies Association, Budapest, June, 2003, and "Preserving U.S. Hegemony in the Middle East: American Policy Towards Egypt after September 11," at the International Studies Association annual conference, Montreal, March, 2004.

# **USAF** Counterproliferation Center (CPC)

# Counterproliferation sponsored books and publications.

Edited by Dr. Barry R. Schneider, Director

Book - The Gathering Biological Warfare Storm

Chapter 1 - U.S. Bio-Defense Readiness

Chapter 2 - Agroterrorism and Foot-and-Mouth Disease

Chapter 3 - Surviellance and Detection (Public Health)

Chapter 4 - The Anthrax Terror (Previously published in *Aerospace Journal*)

#### **Research and Publications**

Chapter 5 - Efficacy and Safety of the Anthrax Vaccine

Chapter 6 - Smallpox: A Primer

Chapter 8 - Assessment of the Emerging Biocruise Threat

Chapter 9 - Next Generation Bioweapons

Chaper 10 - A Biological Warfare Wake-up Call

Book - Know Thy Enemy

Chapter 1 -Deterring International Rivals from War and Escalation

Chapter 3 - The Muslim Brotherhood and Islamic Radicalism

Chapter 4 - Struggle for the Conrol of Pakistan

Chapter 8 - Syria Under Bashar al-Asad

Chapter 9 - Muammar Oaddafi and Libva's Strategic Culture

Chapter 11 - Precise Assessment of Rivals (Dr. Schneider with

Dr. Jerrold Post)

Book - The War Next Time

Chapter 1 - Asymmetrical Rivals

Chapter 3 - South Africa's Chemical and Biological Weapons

Chapter 4 - Assessing U.S. Policy for Retaliating to a

Chemical or Biological Attack

Chapter 5 - Unclassified Methods to Identify Covert

**Biological Warfare Programs** 

Chapter 6 - The Worldwide Biocruise Threat

Chapter 7 - Combat Effectiveness in MOPP4

Chapter 10 - Needed Now: The 85% Quick Fix in Bio-

Defense (Col Davis with Dr. Bruce Bennett)

Monograph—Defending the American Homeland 1993-2003 (Mr. Ellis with Mr. Randall Larsen)

Monograph (pre-publication copy only)—Ayman Al-Zawahiri (LCDR Youssef Aboul-Enein, USN, Office of the Secretary of Defense for International Security Affairs)

# The Center for Strategy and Technology (CSAT)

By Colonel (sel) John Geis, Director

CSAT continued its leadership role in Air Force and DOD in researching the strategic implications of technological choices. In its eighth year of operation, the center supervised the completion of 46 student papers from AWC, SAAS, ACSC, and the Naval Postgraduate School, as well as continuing to fund and support AU faculty research.

The Center continues its efforts to publish significant works exploring the nexus between strategy and emerging technologies. Sixteen AWC students produced CSAT papers in the past year, five of which won significant awards from AU and national military organizations. Five new monographs have been published in the past 12 months, which span topics ranging from directed energy weapons to unmanned aerial vehicles, to the use of medical technology to enhance warfighter performance. Peer review and editing is underway on several more monographs to be published next year.

The Center is headquartered in facilities in building 1450, across from the Air War College. Key Center staff includes: the Director, Col (s) John Geis; Deputy Directors Dr. Grant

Hammond and Mr. Ted Hailes; the AFRL Representative to Air University, Dr. Steve Suddarth; and the Chief Scientist, Dr. Courtney Holmberg.

This staff has performed services for a variety of agencies within DOD as well as for our military allies around the world. The Center assisted the director of doctrine and transformation of the German Air Force in his efforts to better understand future military technologies and trends. The Center staff helped lead the Air Force Scientific Advisory Board study on "Unmanned Vehicles in Perspective." The Center assisted in the crafting of the scenario and helped lead participation in the Air Force Futures Wargame, and is currently working to assist with the Title X Unified Engagement VII exercise this summer. Finally, the Center maintains a relationship with the Commander, U.S. Special Operations Command, and the USSOCOM Future Concepts Branch, in which the Center assists with the future planning and wargaming exercises for all U.S. Special Forces.

The Center maintains close working relationships with a variety of other research and future leaning organizations to include several directorates of the Air Force Research Laboratories, DARPA, the Air Force Strategic Planning Directorate (AF/XPX), Air Force Space Command, and Air Force Special Operations Command. The Center continues to seek opportunities to assist DOD organizations with issues surrounding the strategic implications of technological choices.

In addition to its role in publishing and consulting, CSAT continues to teach courses at the colleges within AU. Each year, the staff teaches an elective on strategy and technology at AWC, and offers an elective at ACSC with a similar focus. The Center also offers courses in unmanned vehicles and directed energy technologies. In all these courses, the students are exposed to future technologies and have the opportunity to visit some of the Air Force's most advanced research facilities.

#### New CSAT Occasional Papers available on-line:

- Hyperspectral Imaging: Warfighting Though a Different Set of Eyes: Paul J. Pabich, October 2002
- Directed Energy Weapons on the Battlefield: A New Vision for 2025, John P. Geis II, April 2003.
- Homeland Security and the Coast Guard: Postured for Technology Improvements, Arthur C. Walsh, June 2003
- Non-Lethal Weapons: Setting our Phasers on Stun? Potential Strategic Blessings and Curses of Non-Lethal Weapons on the Battlefield, Erik L. Nutley, August 2003
- Aircrew Performance: Cutting Edge Technology, Kris M. Belland, September 2003

In addition to the publications listed above, there are AWC student research studies included in the summary at the end of this bulletin.

#### **Research and Publications**



#### **ACSC Student Research**

By Lt Col Fred Warren, Director of Elective/Research Seminars

All students in the ACSC graduating class of 2003 produced research papers on a wide variety of topics as part of either the independent research or electives programs.

#### Award winners were:

- ➤ Maj Steve Dubriske , Commandant's Award for Research Excellence - The International Criminal Court: A Case of the United States Having Its Cake and Eating It Too?
- ➤ Maj Timothy Schultz, U.S. and International Studies Award - The Temple Mount: Cornerstone And Stumbling Block To Peace
- ➤ Maj David Bobb, Military History Studies Award Of Humans, Technology, and Theories: A Tale of Two Billys
- ➤ Maj Scott Beidleman, Joint Warfare and Air and Space Operations Award - Air Force Space Education: Transforming for Joint Operations
- ➤ Maj Bruce Glover, Leadership, Command, and Communication Studies Award - Ethical Leadership in a Cross-Generational Environment: The Chaplain as Ethical Leader and Advisor on Ethics
- ➤ Lt Col Pak-Chuon Chin, Outstanding International Officer Paper - Defining Southeast Asia's Defense Posture Amidst Challenging Times
- ➤ Maj Brian Witeof, Outstanding Military Studies Award Redefining the Role on the National Guard Through Homeland Security: Defending America Against the Asymmetric Threat of the 21st Century
- ➤ Maj Charles Hamilton, Society of Strategic Air Command Research Award - Remotley Piloted Vehicles: The Next Stratofortress
- ➤ Maj Thomas Timmerman, Gen Carl A. "Tooey" Spaatz Award - Assessing Effects-Based Operations Crucial Component Commander
- ➤ Maj Frederick Godfrey, International Society of Logistics Engineers Award - Logistics of Invasion
- ➤ Maj Stephen Petters, Lt Gen John M. Nowak Award for Logistics - Ammo for the Long Haul: The Sufficiency of Policy for Munitions Resupply within the Expeditionary Air Force Construct

For the academic year 2003-2004, all students are enrolled in research seminars focusing on topics of DoD and USAF interest. Students benefit from the unique expertise of our research elective course instructors who lead guided study in their chosen topics. Ten new research awards sponsored by organizations outside ACSC will provide greater opportunities for recognition of this year's outstanding student research.

Each ACSC student is charged to: ...document, critically analyze, and solve air and space power problems of the past ten years...and into the future.

#### **ACSC Faculty Highlights**

By Lt Col Fred Warren, Director of Elective/Research Seminars

In addition to the student research, the ACSC faculty was extremely busy this year. The following is a listing of ACSC faculty academic accomplishments:

Lt Col (Ph.D) Carol Atkinson co-authored (with Charles Krupnick) the chapter "Slovakia and Security at the Center of Europe," in the book *Almost NATO: Partners and Players in Central and Eastern European Security* (Rowman and Littlefield, 2003). She presented the paper "Slovakia's Extraordinary 2002 Election" at the International Studies Association annual conference in Portland, Oregon, 25 February-1 March 2003, and plans to present the paper "The Construction of Democracy: Political Socialization Through Military Engagement" at the Midwest Political Science Association annual meeting in Chicago, IL, 15-18 April 2004.

**Dr. Bruce Bechtol Jr.** presented numerous papers to include: a paper entitled, "U.S. Security and North Korea," at the fourteenth North Park University Korean Symposium, Chicago, IL, 13 October 2003; the paper, "Changing Paradigms of the Cold War: The Korean War," at a conference entitled, "Hot Wars in the Cold Wars," at the Hamburger Institut für Sozialforschung, Hamburg, Germany, 21 May 2003; a paper entitled, "Yi Sun Shin and the Eastern Naval Way of War," at the New York Military Association conference "Non-Western Military Thought," 17 April 2003; and the paper entitled, "The Northern Limit Line Incident of 2002: Intentions and Implications," at the Society for History of American Foreign Relations, 24 June 2003. In February of 2004, he served as a guest speaker at the Maine Corps Command and Staff College, delivering a lecture entitled, "Current Security Issues on the Korean Peninsula." Dr. Bechtol also authored the article, "North Korean Nuclear and Missile Issues and the U.S.-ROK Alliance: An American Perspective," that appeared in the *Korea Observer*, vol. 35, no. 1 (March 2004).

Lt Col Terry Bentley completed his doctoral dissertation entitled, "Perceptions Of Graduates and Their Supervisors Related To The Air and Space Basic Course," for Auburn University. He was the first author of an article entitled, "Student Activities Fees: The Cost of Free Speech," published in the Winter 2003 edition of the *University Risk Management* 

## **Research and Publications**

and Insurance Association Journal. He also co-authored an article entitled, "A Learning Organization: The Boys and Girls Clubs of Lee County" published in the Spring 2003 edition of the Penn GSE Perspectives on Urban Education, 2(1).

Mr. Matt Caffrey (Colonel, USAFR) led several scholarly gatherings and presented numerous papers during 2003. He developed a one-day exercise to help develop engineers as strategists, and executed it at the Air Force Research Laboratory's and the Electronic Security Command's Reserve conferences as well as at the Air Force Research Laboratory's Information Directorate. He served as the Military Operations Research Society's working group chairman for their Transformation Working Group, at their annual conference and he delivered the working group's lead paper, "Wargaming, Catalyst for Transformation." He served as the Master of Ceremonies for the 11<sup>th</sup> annual Connections Wargame conference and delivered two papers: "The History of Wargaming," and "Towards 3rd Generation Wargaming." Mr. Caffrey also delivered three papers to the Origins International Strategy Gaming conference including, "Towards Experimental History." He created a 30-hour course for the Air Force Research Laboratory's Information Directorate to provide a foundation on the Air Force and defense to newly hired civilian engineers. Mr. Caffrey also presented a Faculty Forum at ACSC on the future of wargaming, wrote a mini history of the Gulf War for the Air and Space Power Journal, and is currently working on an Air and Space Power Journal article and a book for Air University Press.

**Dr. Edwina Campbell** served as guest speaker for the U.S. Consulate General, Munich, at two German-hosted conferences on the future of the transatlantic relationship. She also spoke to a group of Bundeswehr Jugendoffiziere (youth officers) and met with the staff of one of Germany's preeminent foreign policy think tanks, the Center for Applied Policy Research. In December 2003 she served as a member of a panel at a conference on the future of the transatlantic relationship, co-sponsored by the Cato Institute and the Friedrich Naumann Foundation, in Phoenix, Arizona. In February 2004, she guest-lectured in the NATO Staff Officers' Orientation Course, National Defense University, In May 2004 she will be guest speaker for the State Department/U.S. Embassy Berlin and guest scholar at the Military Historical Research Center (MGFA), Potsdam. The NATO School, Oberammergau, has also invited her as a guest lecturer. Additionally, Dr. Campbell contributed a chapter, "Vision and Reality of European Security Policy—an American Perspective," to a new book published in German by the Hanns-Seidel-Stiftung, Munich.

Lt Col Paul Clarke was a discussant for the "Globalization and Security" panel at the International Studies Association annual conference in Portland, Oregon, 25 February—1 March, 2003. On 6 January 2004, he presented a lecture on "National Security Strategy and the Instruments of Power" to the students of the Air Mobility Operations course at the Air Mobility Warfare Center located on McGuire Air Force Base, New Jersey.

**Dr. Chuck Costanzo** wrote a book review of *Arms Control: Cooperative Security in a Changing Environment* edited by Jeffrey A. Larsen for the *Air and Space Power Journal*.

Dr. William Dean delivered a lecture on Abd-al Qadir and the Battle of Isly at Auburn, March 2004. Dr. Dean also delivered lectures on French Indochina, Spanish colonial warfare, and air operations in Operation Iraqi Freedom at the University of Southern Mississippi. At the Air Command and Staff College he gave a lecture on Air Power and Small Wars for the faculty forum. In April 2004 Dr. Dean organized a conference on Makers of Non-Western Strategy at CUNY in New York City. At this conference, he delivered a paper on the Art of War of Abd-al Krim and the Rif Rebellion in Morocco 1925-26. In May 2004 Dr. Dean plans to deliver a paper on French Colonial Troops in the Nivelle Offensive in 1917 on the Western Front for the Society of Military History. He has written reviews of Hamilton and Herwig's The Origin of World War I; Nelson MacPhesron's American Intelligence in War-Time London; and Robert Stephan's Stalin's Secret War for Choice. Further Dr. Dean has written reviews of Corum and Johnson's Air Power and Small Wars; and Dale Andrade's America's Last Vietnam Battle for Air and Space Power Journal.

Lt Col Mark DeVirgilio is working on his doctoral dissertation titled "Balancing Information Access and Security: Analysis of United States Policymaking on Encryption" for the School of Public Policy, George Mason University, Fairfax, Virginia. The dissertation analyzes policy actions to protect privacy, while ensuring access to information for public safety and national security purposes. Anticipated defense is summer 2004.

Lt Col (Ph.D) Mike Fiedler presented a paper to the 70<sup>th</sup> annual meeting of the Society of Military History, University of Tennessee, Knoxville, on May 10, 2003 entitled, "Through Different Lenses: Coercion and the Case of the Polisario in Western Sahara." On 16 March 2004, he presented a lecture to the students of the Air Mobility Operations course at the Air Mobility Warfare Center located on McGuire Air Force Base, New Jersey on "National Security Strategy, National Military Strategy, and the Instruments of Power." He also gave a lecture on Peace & Stability Operations for an Air Command and Staff College faculty forum.

**Dr. Bert Frandsen's** book, *Hat in the Ring: the Birth of American Power in the Great War*, was published by Smithsonian Books in October 2003. He gave presentations on the book to the Prattville Rotary Club in June 2003 and at an Air Command and Staff College faculty forum in October 2003. Dr. Frandsen authored an article, "America's First Air Land Battle," in *Air and Space Power Journal* (Winter 2003). He presented two guest lectures at Auburn University "History of Flight" course in March 2003 on American fighter aviation during World War I.

#### **Research and Publications**

**Dr. Lewis Griffith** presented a paper entitled "Globalization and the State of the Developing World: The Case of Saudi Arabia and Vietnam," at the 2003 International Studies Association conference held 25 February -1 March 2003 in Portland, Oregon. In addition, Dr. Griffith was named to the 2003 Board of the International Security and Arms Control (ISAC) Section of the American Political Science Association (APSA) and related to that role served as Chair/Discussant for a panel entitled "Lessons Learned From Iraq" at the ISAC/ISSS Joint conference held 31 October-1 November 2003 at the U.S. Army War College. Dr. Griffith also gave a presentation at an Air Command and Staff College faculty forum entitled "Saudi Arabia: With Friends Like These" in September 2003 as well as presenting a faculty forum on the same subject in November 2003. Dr. Griffith also presented a paper entitled "The Littoral Enforcer" at the March 2004 Air and Space Power conference at ACSC.

Maj Paul Guevin gave a lecture in April 2003 on the current and future state of information operations to the Unmanned Aerial Vehicle Elective seminar at ACSC, and delivered a presentation entitled "Growing Information Operators" for the MIS Training Institute at Georgetown University, Washington, D.C., in December 2003.

**Dr. Mary N. Hampton** co-authored (with Stephen Szabo) Reinventing the German Military, AICGS Report 11, Johns Hopkins. She has four forthcoming publications: "Germany and Peacekeeping: Explaining German Power Projection 'Lite'," in David S. Sorenson and Pia Christina Wood (eds.), The Politics of Peacekeeping in the Post-Cold War Era, (Frank Cass Publishers, forthcoming, 2004); "Community Breakdown? Germany, NATO, and the Guns of September," in James Sperling (ed.) Germany at 55 (forthcoming, 2004); "Ladies Choice: Women and the Reelection of the Schroeder Government," in David Conradt, et al. (eds.), Germany and the 2002 Election (Berghahn, forthcoming, 2004); and, "From Rebel to Wilsonian? Joschka Fischer and German Foreign Policy," in Mareike Koenig/Matthias Schulz (eds.) Die Bundesrepublik Deutschland und die europaeische Einigung, 1949-2000: Politische Akteure, gesellschaftliche Kraefte und internationale Erfahrungen (Franz Steiner Verlag, Stuttgart, forthcoming, 2004). Dr. Hampton gave/plans to give numerous presentations to include: "Community Breakdown? The U.S. and Germany After 9/11," at the German Studies Association, New Orleans, LA, September 2003; "The Wilsonian Impulse Revisited in U.S. Foreign Policy," at Vanderbilt University, March 2004; "Europe and U.S. Strategic Interests," at Air War College, March 2004; "A Comparison of U.S. and German Strategic Cultures," at AICGS, Washington, D.C., April 2004; "The EU as Empire," at an Air Command and Staff College faculty forum, April 2004; "The Wilsonian Impulse Revisited," at the University of Heidelberg, May 2004; "The Wilsonian Impulse Revisited," at the University of Rostock, May 2004; and "Current Issues in U.S.-German Security Relations," for a workshop, Konrad Adenauer Stiftung, Berlin, Germany, June 2004. Additionally, she chaired the panel, Influence on Global Affairs Panel, at the Air and Space Power conference, Air Command and Staff College, March 2004. Dr. Hampton

endorsed a book on Kosovo and Bosnia, *Reflections on the Balkans Wars* for Palgrave Books, August 2003, and reviewed a paper submission for Security Studies, February 2004. She was elected to the Executive Committee, German Studies Association in January 2004.

**Dr. Kevin Holzimmer** reviewed the book *U.S. War Plans:* 1938-1945 by Steven T. Ross (ed.) in *The Art of War* series (Boulder, CO: Lynne Rienner Publishers, 2002). The review appeared in *Air and Space Power Journal*, vol. 17, no. 4 (Winter 2003). Dr. Holzimmer has had his article "Doctrine, Command Arrangements, and Leadership: U.S. Joint Operations in the Southwest Pacific Area, 1943-1945" accepted for publication in *Joint Force Quarterly*.

Mr. Charles Kamps authored two chapters and served as associate editor for a book to be published by Macmillan & Co., entitled *U.S. Defense Interests - The Post-Cold War Transition*. He also authored the following short pieces which appeared in *Air & Space Power Journal*: "The Wasps" (Summer '03), "The C-54 Skymaster" (Summer '03), "The F-86 Sabre" (Summer '03), "Operation Linebacker II" (Fall '03), "Robbie Risner" (Fall '03), "The 1909 Wright Military Flyer" (Winter '03), and "Hap Arnold" (Winter '03).

Dr. Paul Kan authored two articles: "What Should We Bomb? New Targets for a New Millennium and the Abiding Limits of Airpower Theory," *Air and Space Power Journal* (Spring 2004); and "The Perfect Storm: Explaining the Slow Chinese Reaction to the North Korean Nuclear Crisis," *Korea Observer* (forthcoming). Additionally he presented several papers: "What Should We Bomb? New Targets for a New Millennium," at the War and Virtual War conference, Oxford University, United Kingdom, July 2003; "The Perfect Storm: The Slow Chinese Reaction to the North Korean Nuclear Crisis," at the Korean Studies conference, North Park University, Chicago, October 2003; and "What Should We Bomb? Axiological Targeting and the Abiding Limits of Airpower Theory," at the Centennial of Airpower conference, Maxwell Air Force Base, AL, March 2004.

Lt Col (Ph.D) Tony Klucking recently finished his doctoral dissertation, entitled, "Kingdom on Defense: An Analysis of the Policy Streams Approach and a Policy Streams Analysis of the Goldwater-Nichols Act".

Dr. Donald MacCuish was invited to present a paper on Evaluation in Higher Education by the International conference on Innovation in Higher Education, Kiev, Ukraine. He and his colleague, Lt Col Tom Ruby, had a case study entitled "The International Criminal Court (ICC): Could American Military Officers be Tried in The Hague?" published by the Georgetown University Institute for the Study of Diplomacy. Their companion article "Dateline Washington: General Watson to the ICC? The President must decide soon!" is scheduled for publication by the *Journal of Military Ethics* in early 2004. He is also co-author of "The Just War Tradition and Sun Tzu and Mao Tse-Tung," an article scheduled to be published by the Strategic Studies Institute, Army War College. He was also the research advisor

#### **Research and Publications**

to Major Steven Dubriske, who won the 2003 Commandant's Award for Research Excellence for his paper, "The International Criminal Court: A Case of the United States Having its Cake and Eating it Too?" He has several other articles currently in review for publication.

**Dr. Kathleen Mahoney-Norris (Colonel, USAFR)** was appointed a member of the Editorial Board of *Joint Force Quarterly*. She was also selected as a Fellow of the Inter-University Seminar on Armed Forces and Society (IUS) in 2003. Dr. Mahoney-Norris presented the paper "'The Airman and the State': Airpower and Civil-Military Relations" at the 2003 International Biennial conference of the Inter-University Seminar on Armed Forces and Society (IUS) in Chicago, IL, October 2003. She also organized and participated in a roundtable on "Chilly Climate at Mid-Career" sponsored by the Women's Caucus for International Studies, at the 2003 International Studies Association conference in Portland, OR, February 2003.

**Col James Moschgat** wrote an article several years ago entitled, "A Janitor's 10 Lessons in Leadership," that was included in the 2003 SOS leadership curriculum and published in their textbook. The article was also featured in 2003's *More Patriot Hearts*, a collection of inspirational writings compiled by William Coffey.

Dr. Rich Muller published "Losing Air Superiority: A Case Study from the Second World War" in the December 2003 issue of Air and Space Power Journal, and presented a version of that article at the ACSC Air & Space Power conference in March 2004. He also wrote a chapter entitled "The Origins of MAD: A Short History of City Busting," for the forthcoming book: Henry Sokolski (ed.), Getting MAD: Nuclear Mutual Assured Destruction, Its Origins and Practice (Carlisle Barracks, PA: Strategic Studies Institute, April 2004). Dr. Muller delivered the paper, "The Luftwaffe and the Eastern Front: A Reappraisal," at the annual meeting of the Society for Military History, Knoxville, KY in March 2003. He reviewed Reina Pennington's Wings, Women and War: Soviet Airwomen in Word War II Combat for Air and Space Power Journal, and served as a manuscript reviewer for Air University Press and the University of Alabama Press.

Lt Col (PhD) Randy Mullis presented the paper "Peace Enforcement Operations on the Plains: The Sioux Expedition of 1855" at the annual meeting of the Society for Military History in March 2003. His article "The Dispersal of the Topeka Legislature: A Look at Command and Control (C2) during 'Bleeding Kansas' "was published in the *Kansas History: A Journal of the Central Plains*, vol. 27 (Spring/Summer 2004).

**Dr. Douglas Peifer** focused his research efforts on the issue of mutiny, desertion, and insubordination throughout history, with a related research interest in Germany, military history, and public attitudes toward the use of force. In January 2004, he presented a paper at the 118<sup>th</sup> annual meeting of the American Historical Association as part of panel he organized on the topic "From Enemy to Ally: Reconciliation made Real

in Post-war Germany." The previous November, he reviewed Jorg Friedrich's controversial book on the bombing of German cities in WWII, entitled Der Brand: Deutschland im Bombenkrieg 1940-1945. The review and associated material were published online as part of an H-German forum on "World War II Bombing: Rethinking German Experiences." In addition, Dr. Peifer reviewed Hubert Zimmermann's Money and Security. Troops, Monetary Policy, and West Germany's Relations with the United States and Britain, 1950-1971 for The American Historical Review; Hanns Maull's Deutschland im Abseits? for H-German; Robert Kane's Disobedience and Conspiracy in the German Army, 1918-1945 for Air and Space Power Journal; Magarete Myers Feinstein's State Symbols and Gerald Lamprecht's Feldpost und Kriegserlebnis for the German Studies Review. Dr. Peifer's 2002 book, The Three German Navies: Dissolution, Transition, and New Beginning received favorable reviews in The International History Review, vol. XXV, no.3 (September 2003) and The Journal of Military History, vol. 67, no. 3 (July 2003).

**Dr. Matthew Schwonek** authored a review of the book *Hitler Strikes Poland: Blitzkrieg, Ideology, and Atrocity* by Alexander B. Rossino that was published in the *Journal of Military History*, vol. 67, no. 4 (October 2003). He also presented the paper "Revolutionary and Terrorist: The Formative Years of Kazimierz Sosnkowski and the Fate of Revolution, 1905-1911" at the American Association for the Advancement of Slavic Studies, Toronto, Canada, November 2003. Dr. Schwonek has the article "Kazimierz Sosnkowski as Commander in Chief: The Government in Exile and Polish Strategy, 1943-1944" under revision for the *Journal of Military History*.

**Dr. Michael Weaver** presented the paper "U.S. Army Air Corps Economic Intelligence for the Strategic Bombing of Germany, 1939-1941" the Air University Air Power Centennial conference, March 2004. He will present the paper "The Relationship between Diplomacy and Military Force: An Example from the Cuban Missile Crisis" at the annual meeting of the Society for Historians of American Foreign Relations, University of Texas, Austin, June 2004. He currently has the article, "The Volunteers of 1941: The Social Profile of the Pennsylvania National Guard in 1941" under revision for the journal *Pennsylvania History*.

ACSC student research studies are included in the summary at the end of this *Bulletin*.

## **Research and Publications**



# **USAF National Defense Fellows**

# Air Force Fellows: AY 04 Initiates the Walker Series Research Paper Awards

By Ms M. Dee Taylor, Chief, Air Force Fellows

It has been a challenging year for the AY 04 class of Air Force Fellows (AFF). In addition to gaining a great deal of expertise on national security policy and valuable perspectives from the exchange of ideas with the civilian leaders at their respective think-tanks and academic institutions, they have been busy researching and working on their focused research theses. The historical foundation of the Air Force Fellows was the old Air Force Research Fellows. For the first time, the Walker Series, recognizes the contributions this program has made in cutting edge research supporting air and space power and its use in the implementation of strategic policy for the United States and the execution of national security objectives. Each Fellow used the unique access at their fellowships as grounds for research and writing on important national security issues.

The Walker Series recognizes the top three research papers submitted each year by the Air Force Fellows. The presentation of the awards for the inauguration of the Walker Series of papers will be 28 May 04 by the son of Brigadier General Kenneth N. Walker, Mr. Douglas P. Walker.

The topics for this year's class cover a wide array of military subjects—indicating there certainly are diverse interests among the AFF.

Russian Military Reform from Perestroika to Putin: Implications for U.S. Policy—Kris D. Beasley, Lt Col, USAF—Institute for the Study of Conflict, Ideology, and Policy (SCIP), Boston University—Boston, MA

Empowering First Responders-Peer-To-Peer Technology — Mark D. Bontrager, Lt Col, USAF—Program in Arms Control, Disarmament, and International Security (ACDIS), University of Illinois—Champaign IL and Randall J. Richert, Lt Col, USAF—Centre for International Relations (QCIR), Queen's University—Ontario, Canada

Developing Doctrine for the Future Joint Force: Creating Synergy and Minimizing Seams—Charles Q. Brown, Jr., Lt Col, USAF—Strategy, Forces and Resources Division (SF&RD), Institute for Defense Analyses (IDA)—Alexandria, VA

Building Peace by Leveraging Faith: Utilizing Chaplains to Integrate Indigenous Religious Groups in Stability Operations—Christopher J. Burke, Lt Col, USAF—

Zonna M. Crayne, Lt Col, and ANG William Sean Lee, Chaplain (Col), ARNG—John F. Kennedy School of Government, Harvard University—Cambridge, MA

Key Characteristics of Coalition Command and Control for Operations Involving United States Military Forces—Michael A. Canna, Lt Col, USAF—Atlantic Council of the United States (ACUS)—Washington, DC

Struggle for the Heart of Islam and It's Impact on Latin America—Curtis C. Connell, Lt Col, USAF—John M. Olin Institute for Strategic Studies, Weatherhead Center for International Affairs (WCFIA), Harvard University—Cambridge, MA

The Revenge of Europe NATO and the Transatlantic Relationship in the Era of the European Union—Christopher D. Cotts, Lt Col, USAF—Department of International Relations, Florida International University—Miami, FL

Aggressive ISR in the War on Terrorism: Breaking the Cold War Paradigm—William B. Danskine, Lt Col, USAF—Security Studies Program (SSP), Massachusetts Institute of Technology (MIT)—Cambridge, MA

The Relationship Between Homeland Defense and Homeland Security: U.S. Northern Command's Rubik's Cube—William C. DeMaso, Lt Col, USAF—Hoover Institution on War, Revolution, and Peace, Stanford University—Stanford, CA

Airborne Directed Energy Weapon Applications for Special Operations Forces—Brian K. Dougherty, Lt Col, USAF—Special Operations and Low Intensity Conflict, Naval Postgraduate School—Monterey, CA

Contested Ground The Political Feasibility of Nuclear Power in Space—James R. Downey, Lt Col, USAF, Anthony M. Forrestier, Wg Cdr, RAAF and David E. Miller, Lt Col, USAF—John F. Kennedy School of Government, Harvard University—Cambridge, MA

The Bush National Security Strategy: What's all the Fuss About?—Michael S. DuPerier, Lt Col, USAF—International Security and Military Affairs Program, Mershon Center, Ohio State University—Columbus, OH

Military Space Control: An Intuitive Analysis— Adolfo J. Fernandez, Lt Col, USAF—Foreign Affairs, Defense and Trade (FDT), Congressional Research Service (CRS), Library of Congress—Washington, DC

United States: Predator or Protector—Gina M. Grosso, Col, USAF—Weatherhead Center for International Affairs (WCFIA), Harvard University—Cambridge, MA

The Impact Of Low Cost UAVs On Homeland Security—William E. Herr, Col, USAF—Foreign Policy Studies Program, Brookings Institution—Washington, DC

#### **Research and Publications**

The Business of Terror—Jennifer L. Hesterman Col (Sel), USAF—International Security, Center for Strategic and International Studies (CSIS)—Washington, DC

Shields, Swords, and Scimitars Shaping U.S. Nuclear Posture in Fourth Generation Warfare—John R. Ingham, Lt Col, USAF—International Security Studies Program, The Fletcher School of Law and Diplomacy, Tufts University—Medford, MA

China's New Relationships with its Neighbors—Michael Joy, Lt Col, USAF—Institute for the Study of Diplomacy (ISD), Edmund A. Walsh School of Foreign Service (SFS), Georgetown University—Washington, DC

Fighting In The Gray Zone: A Strategy To Close The Gap—Joanne M. Fish, Commander, USN, Samuel J. McCraw, Lt Col, USAF and Christopher J. Reddish, Col, USA—John F. Kennedy School of Government, Harvard University—Cambridge, MA

Air and Space Expeditionary Force Crisis Action Leadership for Commanders—James P. Molloy, Col, USAF—Senior Seminar, Foreign Service Institute, National Foreign Affairs Training Center—Washington, DC

Leaks in the National Information Infrastructure Dike: Fact or Fable? Who Should Protect Us?—Curtis O. Piontkowsky, Lt Col, USAF—Program on Information Resources Policy (PIRP), Harvard University—Cambridge, MA

Genesis and Evolution of the United States Air Force Academy's Officer Development System—Paul A. Price, Lt Col, USAF—Institute for National Security Studies (INSS), United States Air Force Academy—USAF Academy CO

Understanding and Assessing Risk of Intrastate Conflict: Human Development Theory and Practice—Gary O. Renfrow, Lt Col, USAF—College of Arts & Sciences, University of Miami—Coral Gables, FL

Information Warfare: From Iron To Trons—Marvell Roberson, Lt Col, USAF—Ridgway Center for International Security Studies, University of Pittsburgh—Pittsburgh, PA

Access and Air Bases in Iraq—Steven G. Seroka, Lt Col, USAF—The Washington Institute (TWI)—Washington, DC

Papers produced by the AF Fellows in 2003 are included in the summary at the end of this *Bulletin*.



# College of Aerospace Doctrine, Research and Education (CADRE)

#### **CADRE's Airpower Research Institute**

By Colonel Dale Hayden, Director

ARI is one of six directorates of CADRE. Airpower Research Institute (ARI) fulfills an important role in AU by acting as a "cradle to grave" system for research—research made available both in print and electronically. The institute not only solicits and publishes research but also carries out its own research projects and supports other AU research programs.

The AU Dean of Research's office operates out of ARI with the mission of "creating research opportunities that promote professional development and produce innovative thinking on critical military issues." To accomplish this mission, the dean works closely with research directors in AU schools, the AU Command Research Advisory Board (CRAB) and ARI's Research Support Division.

The Professional *Journals* Division seeks to promote discussion, debate, innovative thinking, and good writing on a wide range of issues relating to aerospace power. It produces three versions of the quarterly *Air and Space Power Journal (ASPJ)*—the English, Spanish, and Portuguese editions. The division also publishes an on-line journal titled the *Air and Space Power Chronicles* (see page 17 of this *Bulletin*). These journals not only solicit scholarly articles and original research but also provide venues for publishing those pieces.

The task of producing timely research falls to the Research Division of ARI. This division consists of a small group of military defense analysts who research future concepts of operations. The division publishes the *ARI Papers and Quick-Looks*.

CADRE's ARI reaches across the spectrum of research needs. It joins the Air Force's other research centers in providing both a stimulus for original research and a vehicle for presenting the results of that research.

# The CADRE Papers, ARI Papers, and Quick Looks

By Dr. Daniel Mortensen, Series Editor

CADRE Papers, ARI Papers, and Quick-Looks are occasional publications sponsored by CADRE's Airpower Research Institute. Both are dedicated to promoting understanding of air and space power theory, doctrine, and application. CADRE Papers are published by AU Press; ARI Papers and Quick-Looks by CADRE's ARI directorate. Studies from all series are broadly distributed to USAF, the Joint Staff and Joint

#### **Research and Publications**

Commands, DOD, and other governmental organizations, sister-service PME schools, selected universities, military and civilian think thanks, and leading scholars. All publications are available on the AU Research Web at <a href="https://research.au.af.mil/">https://research.au.af.mil/</a> or <a href="https://research.airuniv.edu">https://research.airuniv.edu</a>.

An older *CADRE Paper* series (1985-90) is available on this electronic site as is the revived series starting in 1998. The current series is also generally available in hard copy from the AU Press.

All faculty and students assigned to AU, as well individuals throughout the Air Force are invited to submit unclassified manuscripts to ARI for publication consideration. Manuscripts should deal with air and space history, theory, doctrine, strategy, or employment or with joint or combined service matters bearing on the application of air and space power.

One new CADRE Paper has been published since May 2003:

 America's First Air Battles: Lessons Learned or Lessons Lost, by Aldon E. Purdham, Jr., no. 16.

Filtering airpower factors through three conflicts, Korean War, Vietnam War, and Operation Desert Storm, and looking particularly at the early stages of air operations, the author tests the Michael Howard dictum that current doctrine is probably wrong, but the capability of the military to get it right when a particular conflict begins is what is important. The author examines important airpower factors such as familiarity with the nature and geography of the conflict; parity with the adversary; command and control of air assets, and the confluence of airpower weapons with doctrine and training. His conclusion, military doctrine seems out of alignment in the early stages of conflict, not because of poorly developed doctrine, but rather quick changes made in national strategy that cannot be perfectly anticipated in doctrinal writings and practiced in training regimes.

#### The Air Staff and Senior AF Leaders Commission the ARI Papers

Originally conceived to provide independent analysis of a wide range of issue related to airpower theory, doctrine, and employment, the *ARI Papers* now emphasize Concepts of Operations as well. The purpose of the papers is to provide research products that will underwrite mature decision-making by the Air Force and joint warfighters, as well as support education, doctrine development and research at AU.

Two ARI Papers have been published since May 2003:

■ Coalition Warfare: Coordination and Planning Options, by Robyn S. Read, ARI Paper 2003-02

In the aftermath of the Cold War the world political environment has been and continues to be in constant change with evolving formats and cause-effect relationships. Although "change" in and of itself, is not a new phenomenon. More accurately for today, it is the rate of change and the lack of accurate lead indicators (i.e., the unpredictability) that complicate the coalition picture in the 21st Century. The

results are generally short agendas with narrowly focused objectives and limited commitments.

The author identifies some of the issues associated with coalition building and coordination and reports on two effective but distinct methods of meeting national requirements. The intent is to compare the U.S. Central Command's Coalition Coordination Center (CCC) in Tampa with the Multinational Planning Augmentation Team (MPAT) approach in U.S. Pacific Command's area of operation, and to show how the two commands (U.S. Central Command and U.S. Pacific Command) are approaching similar problems in dissimilar environments. Then finally, this paper recommends consideration of a *joint* reserve (or guard) affiliate for each combatant command with specific tasking in coalition planning and staffing areas.

■ The International Development of Space and Its Impact on U.S. National Space Policy, by Dale L. Hayden, ARI Paper 2004-01,

In the forty years since President John F. Kennedy proclaimed the ultimate goal of putting a man on the moon, America has moved from space exploration to space exploitation, and as the sole remaining superpower the U.S. dominates space. First the author defines the significance of space in today's global environment, detailing how space has become an integral part of both national U.S. security and economic vitality for developed and developing nation alike. Next it describes the U.S. space policy and how it has evolved over the last forty years. The paper examines four potential courses of action by which policymakers can best protect the U.S. interest: technological domination, multilateral action, unilateral action, and an analysis of America as an empire in the twenty-first century. The paper concludes with the suggestion that the U.S. policymakers will select a multilateral approach as it best protects U.S national interests.

# A New Research and Publication Tool with "Quick-Looks."

In the last few months of 2003, the director of ARI, Col Dale L. Hayden conceptualized a project with which CADRE could undertake brief investigations of potentially important ideas and courses of action that can help the Air Force look forward, especially in regards to Concept of Operations. These resulting two-page papers, called Quick Looks, help analysts conceptualize their ideas and with a selective distribution hopefully get feedback that can guide continuing research. A dozen were produced in 2003 with examples such as:

• Counterguerrilla Warfare for Airmen, by Thomas R. Searle

The Author suggest several new potential ways that the Air Force can help in the very difficult task of controlling guerrillas and insurgents.

• Transformation: Re-stating the Close Air Support (CAS) Mission, by Robyn S. Read

# **Research and Publication Opportunities**

A-FACs and Air Battle Command and Control (ABCC) were once critical elements for CAS but fell out of favor and relative disuse. The author suggests digging into the CAS problem will reenergize the old system, and updated technologies and doctrine will provide adequately tailored and effective CAS.

#### Air and Space Power Journal

By Lt Col Paul Berg, ASPJ Editor

Air and Space Power Journal (ASPJ) is the professional journal of the USAF and the leading forum for worldwide air and space power debate. ASPJ promotes professional dialogue and is published quarterly in English, Spanish, and Portuguese. The journal focuses on the operational and strategic levels of war and contains feature length (2,500–5,000 words) and opinion (1,500 words) articles on these and other topics of interest to Air Force members.

You can receive ASPJ three ways. First, the journal is published in hardcopy form. It is also available on-line at our Air and Space Power Chronicles Web site, www.airpower.au.af.mil. The web site also contains all back issues of the English language ASPJ, issues of the Air University Review back to 1972, and the CGO Voices on-line journal with more aerospace power articles that could not fit into APSJ, and more. Current and back issues of the Spanish and Portuguese editions are available in the Web site's "Air and Space Power International" section. The site is fully indexed and searchable, providing a great research resource. In 2003, the journal added a new electronic subscription service whereby subscribers receive a quarterly E-mail containing a table of contents with links to the full-text articles in each new ASPJ issue. To subscribe to the journal's paper or E-mail versions, go to:

http://www.airpower.au.af.mil/airchronicles/howto.html#apjsubscribe.

*ASPJ*'s offers a forum for shaping professional dialogue. You can help shape that dialogue by contributing. For guidelines and advice on writing and submitting an article, see: <a href="http://www.airpower.au.af.mil/airchronicles/howto.html#apjsu">http://www.airpower.au.af.mil/airchronicles/howto.html#apjsu</a> bmit.

Book reviews are one of the best, yet least used tools for acquiring knowledge. Good book reviews allow you to see one opinion of the work before you invest time, effort, and money reading the book yourself. As professionals, our time is valuable and we cannot afford to waste it reading a poorly written or flawed work. Book reviews help busy professionals decide how to spend their personal development time. *ASPJ* features two book review sections designed to allow our readers to capture the main points of significant books and programs related to air and space power. "Net Assessment" offers long (1,000-1,500 word) reviews that summarize the latest air and space power scholarship and offer a critical assessment of the argument of each work. "Touch and Go" reviews usually consist of 200 word assessments of aviation related works designed to provide the widest range of material

for our readers including computer-based products. If you want to contribute a book review, see the list of available books (you get to keep the book in exchange for writing the review) and our reviewer guidelines at: http://www.airpower.au.af.mil/airchronicles/bookmain.html

#### **AU Library**

By Terry L. Hawkins, Reader Services Division

The following is a list of selected special bibliographies posted on the Air University Library webpage:

Peacekeeping

http://www.au.af.mil/au/aul/bibs/peacekp03/peacekp03.htm

**❖** Afghanistan

http://www.au.af.mil/au/aul/bibs/afgha03/afgha03.htm

Terrorism Today

http://www.au.af.mil/au/aul/bibs/tertod/tertod.htm

❖ Force Protection

http://www.au.af.mil/au/aul/bibs/force/fp.htm

Syria

http://www.au.af.mil/au/aul/bibs/syria/syria.htm

**❖** Military Transformation

http://www.au.af.mil/au/aul/bibs/miltrans/trans.htm

Nonlethal Weapons

http://www.au.af.mil/au/aul/bibs/soft/nonlethal.htm

**❖** Conflict Termination

http://www.au.af.mil/au/aul/bibs/wart/conflict.htm

- ❖ North Korea: Selected Online Resources http://www.au.af.mil/au/aul/bibs/nkorea2/northkorea2.htm
  - ❖ Posse Comitatus

http://www.au.af.mil/au/aul/bibs/posse/posse.htm

A complete listing of AU Library bibliographies is available to the Air University research community at: http://www.au.af.mil/au/aul/bibs/bib97.htm

In July of 2003, Air University Library successfully brought their new web-based catalog online. Endeavor Voyager is a state of the art interactive catalog leading to the holdings of AU Library, the SNCOA Library, and the Community Libraries located on Maxwell and the Gunter Annex. A recent enhancement to the Voyager catalog includes reviews, tables of contents, and images of jacket covers for newly acquired commercially published books. The online catalog is available at: <a href="https://sisko.au.af.mil/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=dbPage">https://sisko.au.af.mil/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=dbPage</a>

Finally, AU Library continues to offer the Air University Academic Community the best and most useful online databases. In 2003, we added Asia Intelligence, Militant Islam, and the InfoTrac Military and Intelligence databases. Our most recent addition is JSTOR, or the Journal Storage Archive of 239 full text resources. A complete listing of AUL database subscriptions and access information is available at: <a href="http://www.au.af.mil/au/aul/dbases">http://www.au.af.mil/au/aul/dbases</a>

# **Research and Publication Opportunities**

#### **AU Press Publications**

By Dr. Marvin Bassett, Journals Editor

AU Press, a division of AU Library, publishes school-selected student papers, faculty research efforts, textbooks, and curriculum-related materials, as well as the *AU Catalog* and other administrative documents that directly support AU PME. Among the series of school-sponsored papers we support are the AWC Maxwell Papers, ACSC Wright Flyers, SAASS theses, and CADRE Papers. In addition, AU Press sponsors the Fairchild Papers, selected essays of research value to the Air Force that otherwise would not be published. Recent monographs in this series include *Winning the Retention Wars: The Air Force, Women Officers, and the Need for Transformation* by Lt Col Laura DiSilverio; *Agile Combat Support Doctrine and Logistics Officer Training* by Lt Col J. Reggie Hall; and *The Role of Rhetorical Theory in Military Intelligence Analysis* by Maj Gary Mills.

AU Press also publishes monographs, books, and other research and educational materials under the guidance of the AU Publications Review Board, at the instruction of higherlevel headquarters, and in cooperation with Air Force agencies. Recent publications include AU's Self-Study Report and Follow-Up Plan; a revision of AU-2, Guidelines for Command: A Handbook on the Leadership of People for Air Force Commanders and Supervisors; Military Aviation by Clément Ader, edited and translated by Lee Kennett; Responsibility of Command: How UN and NATO Commanders Influenced Airpower over Bosnia by Col Mark A. Bucknam; A Need to Know: The Role of Air Force Reconnaissance in War Planning, 1945–1953 by Lt Col John T. Farguhar, USAF, retired; A-10s over Kosovo: The Victory of Airpower over a Fielded Army as Told by the Airmen Who Fought in Operation Allied Force by Col Christopher E. Haave and Lt Col Phil M. Haun; Airpower: Myths and Facts by Col Phillip S. Meilinger, USAF, retired; a reprint of the classic 1978 text Airpower in Three Wars by Gen William Momyer; and Commanding an Air Force Squadron in the Twenty-First Century: A Practical Guide of Tips and Techniques for Today's Squadron Commander by Lt Col Jeffry F. Smith.

The Press will soon publish several works of interest to the air and space community. These include *Voices from the Dark* by Lee Humiston; and *Interagency Fratricide: Policy Failures in the Persian Gulf and Bosnia* by Maj Vicki J. Rast.

Printed copies of our products are available at the AU Press Bookstore, 131 West Shumacher Avenue, Maxwell AFB, AL 36112-6615. Electronic copies are available via our Web site at http://www.maxwell.af.mil/au/aul/aupress. For a printed or electronic copy of the *Air University Press Publications* catalog, please contact the bookstore at 334-953-2773, DSN 493-2773, or fax us at 334-953-6862. If you have a completed manuscript you would us to consider for publication, please submit your manuscript to the AU Press deputy director at the address shown above, or contact the director, Dr. Shirley Laseter, at 334-953-2505, DSN 493-2505.

# USAF Institute for National Security Studies (INSS), (USAF Academy)

By Dr. James M. Smith, Director

The mission of the Air Force Institute for National Security Affairs (INSS) is "to promote national security research for the Department of Defense within the military academic community, to foster the development of strategic perspective within the United States Armed Forces, and to support national security discourse through outreach and education." Its research focuses on military policy issues relevant to the following areas: arms control and strategic security; counterproliferation, force protection, and homeland security; air and space issues and planning; information operations and information warfare; and regional and emerging national security issues.

INSS coordinates and focuses thinking from across the military academic community to develop new ideas for defense policy making. INSS fosters strategic partnership with institutions such as Air University in its development of topics, selection of researchers, and administration of sponsored research. It also hosts conferences and workshops and facilitates the dissemination of information to a wide range of private and government organizations.

#### INSS publications in conjunction with AU:

- ❖ Didi Kuo, "High Ground over the Homeland: Issues in the Use of Space Assets for Homeland Security," *Air and Space Power Journal* XVII (Spring 2003).
- ❖ Kenneth Luikart, "Transforming Homeland Security: Intelligence Indications and Warning," *Air and Space Power Journal* XVII (Summer 2003).

# **Research and Publication Opportunities**

#### Air Force Journal of Logistics

By Beth F. Scott, AFJL Editor

The Air Force Journal of Logistics is the professional logistics publication of the Air Force. We provide an open forum for presenting research, innovative thinking, and ideas and issues of concern to the Air Force and civilian logistics communities.

The *Journal* is distributed worldwide. It reaches all segments of the Air Force and nearly all levels of the Department of Defense and U.S. Government. You'll also find the *Journal* is read by foreign military forces in 26 countries, people in industry, and students at universities with undergraduate and graduate programs in logistics.

We have a strong research focus, as our name implies, but that's not our only focus. Logistics thought and history are two of the major subject areas you'll find in the *Journal*, and by no means are these areas restricted to just military issues or are our authors all from the military.

The AFJL staff also produces and publishes a variety of high-impact publications—books, monographs, reading lists, and reports. That's part of our mission—address logistics issues, ideas, research, and information for aerospace forces.

Unsolicited manuscripts are welcome from any source (civilian or military). They are subject to expert and peer review, internally and externally, to ensure technical competence, accuracy, reflection of existing policy, and proper regard for security. Manuscripts should be from 1,500 to 5,500 words. The preferred method of submission is via electronic mail (e-mail) to editor-AFJL@maxwell.af.mil. Manuscripts can also be submitted in hard copy to the *Air Force Journal of Logistics*, 50 Chennault Circle, Maxwell AFB, Alabama 36112-6417. If this method is used, a 3.5-inch disk, Zip disk, or compact disk containing an electronic version of the manuscript should accompany the hard copy. For further information on writing and submitting a manuscript, contact the AFJL staff at DSN 493-0885/0887 or Commercial (334) 953-0885/0887.

#### On the Internet

In addition to the printed magazine, we also have an online version of the *Journal*, which can be downloaded or read via any standard Web-based browser at http://www.aflma.hq.af.mil/lgj/Afjlhome.html.

#### **Ordering Information**

U.S. Government organizations, employees of the U.S. Government, or colleges and universities with undergraduate or graduate programs in logistics should contact the AFJL editorial staff for ordering information: DSN 493-0885/0887 or Commercial (334) 953-0885/0887. *AFJL* subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402. Annual rates are \$15.00 domestic and \$18.75 outside the United

States. The AFJL editorial staff maintains a limited supply of back issues.

# New Air University Instruction on Research and Publication

By Lt Col Bruce Shapiro, Chief, CADRE's AU Research Support Division

AUI 36-2321 Research and Publication was signed on 6 October 2003. This instruction specifies responsibilities and establishes procedures for research and publication at Air University, specifically the Continuum of Officer Professional Military Education schools and colleges, School of Advanced Air and Space Studies, and the Air Force Fellows. It defines relationships between AU; the AU Dean of Research; the College of Aerospace Doctrine, Research and Education; the AU Command Research Advisory Board; the AU Command Research Advisory Board Working Group; as well as the Center for Strategy and Technology, the Counterproliferation Center, and the Air University Library/Air University Press. This instruction further applies to any other AU organization that may undertake research and publication.

This new instruction re-defines the Command Research Advisory Board (CRAB) and the CRAB working Group (CRAB-WG).

The CRAB consists of AU/CC (Chair), AU Dean of Research (Executive Director), AU/CF, Commandants and Commanders of AU Research organizations. The CRAB seeks to create research opportunities that will sharpen the minds of rising air and space leaders and produce innovative thinking on critical military issues. The CRAB meets as required, but at least semiannually (Spring and Winter).

The CRAB-WG consists of the AU Command Chairs, the Chiefs of Research and Publication of the AWC, ACSC and SAASS; a representative of the Air Force Doctrine Center; and the directors of other AU research organizations, including CADRE/Airpower Research Institute, AU/Center for Strategy and Technology, AF Counterproliferation Center, AF Fellows Chief, and the AU Library. The working group helps in the solicitation of topics from the MAJCOMs, determines if any topics from the previous year should be retained, reviews abstracts of recent AU papers and keeps CADRE informed of any issues which would help provide better services. The CRAB-WG also advises CRAB on issues related to research and publication at AU and helps coordinate the AU Research Agenda.

## **AU Research at Maxwell**

Each year the Air University commander invites senior DoD, Air Force, and sister service leaders to propose research topics for the incoming classes at Air University. This report seeks to provide AU research sponsors with feedback on the resulting research papers. The studies in the report represent just-completed student projects that (1) directly address research topics submitted from the field or (2) were initiated at AU and may contribute to field requirements.

This report is organized to facilitate finding research related to a given topic. Because some papers may relate to more than one topic, they may appear more than once in this report.

To speed the availability of reports to our sponsors, the papers listed in this report are available now via the SIPRNET at http://research.maxwell.af.smil.mil. As soon as each paper is cleared for public release, it will be posted on the Internet on the AU Research Web (https://research.maxwell.af.mil). Since copies on this Internet site will be unclassified, we advise first checking the Internet site for papers of interest. Technical help for using either of these sites is available at DSN 493-5904 COM (334) 953-5904.

Because there may be a problem with some people accessing the ".mil" site we have opened another copy of the AU Research Web at http://research.airuniv.edu.

Comprehensive list of Maxwell research for 2003



#### **Sponsor Group**

	Page
9 <sup>th</sup> Air Force	21
12 <sup>th</sup> Air Force	21
AF Battlelab	22
AF Materiel Command	22
AF Special Operations Command	23
AF Surgeon General	23
Air Armament Center	24
Air Combat Command	24
Air Education and Training Command	24
Air Force Doctrine Center	25
Air Mobility Command	25
Chief of Staff, Air Force	25
HQ AF Air & Space Operations	26

	Page
HQ AF Plans & Programs	26
HQ AF Warfighting Integration	26
HQ Civil Air Patrol	27
INSS USAF	27
Joint Chiefs of Staff	30
Pacific Air Forces	31
US Air Force in Europe	31
US Central Command	31
US European Command	32
US Joint Forces	32
US Special Operations Command	32
US Strategic Command	32
Other Papers of Note	33

#### **School Abbreviations**

ACSC Air Command & Staff College

AFF Air Force Fellows AWC Air War College

SAASS School for Advanced Air & Space Studies

#### 9th Air Force

Requested Topic	Title of Paper	Author	School
Replace Combat	Integrating Unmanned Aerial Vehicles (UAVs)	Jayson Alteri	
Aircraft with UAVs	with Current Combat Search and Rescue (CSAR)		ACSC
	Doctrine		
	Remotley Piloted Vehicles: The Next	Charles T.	ACCC
	Stratofortress	Hamilton	ACSC
Use SIPRNET Only	Program on Information Resources Policy	Sean M.	AFF
for the Entire DoD		Patrick	АГГ

#### 12th Air Force

Requested Topic	Title of Paper	Author	School
Hiding Under the	The International Criminal Court: A Case of the	Steven D.	
SOFA—Are U.S.	United States Having Its Cake and Eating It	Dubriske	ACSC
Troops Protected			
	The International Criminal Court: Implications for	David Hater	ACSC
	the Warfighter		ACSC
Posse Comitatus: Is It	USAF Force Protection: Is It Really Everyone's	Myron L.	AWC
Time for a Change?	Responsibility?	Freeman	AWC
	Redefining the Role on the National Guard	Bryan Witeof	
	Through Homeland Security: Defending America		ACSC
	Against the Asymmetric Threat of the 21st Century		

## AF Battlelab

Requested Topic	Title of Paper	Author	School
Changes to Pre-	Ammo for the Long Haul: The Sufficiency of Policy	Stephen	
positioning Weapons	for Munitions Resupply within the Expeditionary Air	Petters	
Under the	Force Construct		ACSC
Transformational			
Flight Plan			
Cross-node	Joint Time Sensitive Targeting: Operationalizing	Marc S.	
Deconfliction for Time	Airpower	Jamison	
Critical/Mobile			
Targeting Under			SAASS
Persistent Area			
Dominance (PAD)			
Concept			
	From Normandy to Kandahar: Enhancing the	David M.	
	Synergy Between Land Based Special Forces and	Sullivan	SAASS
	Combat Air Operations		

## AF Materiel Command

Requested Topic	Title of Paper	Author	School
AFMC Consolidated	Maintenance Concepts of Low Observable	William	ACSC
Topics 1-11	Signatures in Legacy and Modern Aircraft	Baily	ACSC
AFMC	Military Transformation: Issues for Congress and	Lloyd D.	
Transformational	Status of Effort	DeSerisy	AFF
Leadership Center			
Contracting Out	USAF Force Protection: Is It Really Everyone's	Myron L.	
Security Related	Responsibility?	Freeman	AWC
Services			
Examine Methods of	Lead Warfighters and Innovations: Collaborative	Sean M.	
Facilitating	Methods of Filling Capability Gaps	Frisbee	
Technology Push to			ACSC
Satisfy Warfighter			
Requirements			
Global Strike Task	Faster and Farther: Implications of Prompt Global	Stephen L.	
Force (GSTF) Strategy	Strike	Davis	SAASS
Impact on Logistics			SAASS
Concepts			
Lean Implementation	The Importance of In-transit Visibility on U.S.	Anthony	ACSC
	Military Logistics	Butera	ACSC
Munition Data Link's	Ammo for the Long Haul: The Sufficiency of Policy	Stephen	
Support of Real Time	for Munitions Resupply within the Expeditionary Air	Petters	ACSC
C4I	Force Construct		
Munitions Sustainment	The Importance of In-transit Visibility on U.S.	Anthony	ACSC
	Military Logistics	Butera	ACSC
Predictive Budget for	The Importance of In-transit Visibility on U.S.	Anthony	ACSC
Sales Pricing	Military Logistics	Butera	ACSC
Roadmap for Forming	The Importance of In-transit Visibility on U.S.	Anthony	
Strategic Alliances	Military Logistics	Butera	ACSC
with Industry			

Requested Topic	Title of Paper	Author	School
Secure Industrial	The Matador's Dance: Engaging the U.S. in Fourth	Mark	ACSC
Facilities	Generation Warfare	Murphy	ACSC
	Defeating the United States with Radiological	Julian M.	ACSC
	Weapons in Fourth Generation Warfare	Chesnutt	ACSC
System Procurement	Lead Warfighters and Innovations: Collaborative	Sean M.	ACSC
Time	Methods of Filling Capability Gaps	Frisbee	ACSC
The Use of	Lead Warfighters and Innovations: Collaborative	Sean M.	
Technology Readiness	Methods of Filling Capability Gaps	Frisbee	
Levels (TRLs) for			ACSC
Technology			
Development			

# AF Special Operations Command

Requested Topic	Title of Paper	Author	School
AFSOC/SOCOM's	The International Criminal Court: A Case of the United	Steven D.	
Future Role (if any)	States Having Its Cake and Eating It	Dubriske	ACSC
in Homeland Defense			
	Redefining the Role on the National Guard Through	Bryan	
	Homeland Security: Defending America Against the	Witeof	ACSC
	Asymmetric Threat of the 21st Century		
DOD Effectiveness	Ammo for the Long Haul: The Sufficiency of Policy for	Stephen	
in Finding and	Munitions Resupply within the Expeditionary Air Force	Petters	
Defeating/Destroying	Construct		ACSC
Surface to Air			
Missile Threats			
The Future of UAVs	Remotley Piloted Vehicles: The Next Stratofortress	Charles T.	ACSC
in SOF Warfare		Hamilton	ACSC
	The International Criminal Court: A Case of the United	Steven D.	ACSC
	States Having Its Cake and Eating It	Dubriske	ACSC

# AF Surgeon General

Requested Topic	Title of Paper	Author	School
Posse Comitatus and	USNORTHCOM from Crisis to Consequence	Christopher	ACSC
Homeland Security	Management: In Support of Whom?	F. Carper	ACSC
	Helping Hand—The Border Duress Call: Military	Greg A.	
	Assistance to Federal Agencies in the Aftermath of	Haase	AFF
	September 11, 2001		
The Role of the Air	Helping Hand—The Border Duress Call: Military	Greg A.	
Force in Homeland	Assistance to Federal Agencies in the Aftermath of	Haase	AFF
Security	September 11, 2001		
The Role of the	USNORTHCOM from Crisis to Consequence	Christopher	
National Guard	Management: In Support of Whom?	F. Carper	ACSC
Medics in Homeland			ACSC
Security			
-	Redefining the Role on the National Guard Through	Bryan	
	Homeland Security: Defending America Against the	Witeof	ACSC
	Asymmetric Threat of the 21st Century		

Requested Topic	Title of Paper	Author	School
Unintended	Unintended Consequences of A-76 and Downsizing of	Linda M.	
Consequences of A-	the Military	Thomas	AWC
76 and Downsizing			

#### Air Armament Center

Requested Topic	Title of Paper	Author	School
Cross-node	Joint Time Sensitive Targeting: Operationalizing	Marc S.	
Deconfliction for	Airpower	Jamison	
Time			
Critical/Mobile			SAASS
Targeting Under			SAASS
Persistent Area			
Dominance (PAD)			
Concept			
	From Normandy to Kandahar: Enhancing the Synergy	David M.	
	Between Land Based Special Forces and Combat Air	Sullivan	SAASS
	Operations		

## Air Combat Command

Requested Topic	Title of Paper	Author	School
Airborne UCAV	Remotley Piloted Vehicles: The Next Stratofortress	Charles T.	ACSC
"Manager"		Hamilton	ACSC
Decentralized	Centralized Control with Decentralized Execution: Never	Daniel F.	
Execution—Is There	Divide the Fleet?	Baltrusaitis	AFF
a Better Way?			
	Centralized Command—Decentralized Execution:	Richard M.	
	Implications of Operating in a Network Centric Warfare	Gomez	AWC
	Environment		
Determining the	Assessing the effects of Bush Administration National	Theron G.	
Optimal Use of	Security Policy on the Air Force Active/Reserve	Davis	
Active Duty,	Component Mix		
Reserve, and ANG			AFF
Manpower within an			
AEF-aligned Total			
Force			
The Cascading	The Dilemma of Dwindling Airframes: The Past,	James T.	
Theory for Reserve	Present, and Future of Air National Guard	Marx	ACSC
Force Equipage			

# Air Education and Training Command

Requested Topic	Title of Paper	Author	School
Mentorship Role in	Air Force Mentoring: Developing Leaders	Todd R.	ACSC
Today's Air Force		Lancaster	ACSC

#### Air Force Doctrine Center

Requested Topic	Title of Paper	Author	School
Centralized Control and Decentralized Execution	Remembering the Future of Centralized Control— Decentralized Execution	Patrick J. Sheets	AFF
	Centralized Control with Decentralized Execution: Never Divide the Fleet?	Daniel F. Baltrusaitis	AFF
	Centralized Command - Decentralized Execution: Implications of Operating in a Network Centric Warfare Environment	Richard M. Gomez	AWC
How Does the Media Influence Our Military Strategy?	Asymmetric Warfare—Exposing America's Weakness	Bradley A. Kinneer	ACSC
	Military and the Media: A Comparison Between Kosovo and the War on Terrorism	Theresa Giorlando	AWC
	American Propaganda	John Sweeney	ACSC
	Non-Coercive Airpower: An Indictment of Incrementalism	Brad Bredenkam	ACSC
Implications of Effects Based Operations (EBO) for Air Force Doctrine	Can Effect-based Operations be Codified in Air Force Doctrine?	Scott E. Caine	SAASS
Strategic Attack	Strategic Attack: Defined and Refined	Russell C. Barnes	AWC

# Air Mobility Command

Requested Topic	Title of Paper	Author	School
Distributed and	C-17A: Operation Enduring Freedom	Michael R.	
Consolidated	Employment/Deployment: Lessons Observed	Shanahan	
Enroute			AWC
Infrastructure			
Comparison			

# Chief of Staff, Air Force

Requested Topic	Title of Paper	Author	School
Fully Integrated	AOC Weapons System: Is the Concept Viable for the	Parker W.	
Command and	21st Century	Northrup	
Control: How do We		III	SAASS
Make the AOC a			
Weapons System			
How do We Get the	The United States Air Force Core Values: An Analysis	Douglas C.	
Entire Air Force into	and Proposal	Hall	ACCC
the Rhythm of the			ACSC
AEF?			
	Time to Take Action: A Plan to Improve AMC's	Bryan E.	ACCC
	Warfighting Support for the Combatant	Miller	ACSC

Requested Topic	Title of Paper	Author	School
Let's Get Serious	Critical Analysis of USAF Weight and Body Fat	Daniel	
About Physical	Management Program	Merry	
Fitness in Our		-	ACSC
Expeditionary Air			
Force			
Operational Flying	Operational Flying Training—Are We Training for the	James N.	
Training: How Must	Right Fight?	Post, III	
it Change to Deal			AWC
with How We Find			AWC
Ourselves Really			
Fighting?			

# HQ AF Air & Space Operations

Requested Topic	Title of Paper	Author	School
AU-Initiated	Homeland Defense: At Risk as a Result of Civil	Tonja M.	AFF
Research	Support?	Brickhouse	АГГ
Does the USAF	A Question of Access: Options for Air Mobility	Donald J.	
Need the Air	Command's Force Mix	Halpin	AFF
Reserve		_	АГГ
Component?			

# HQ AF Plans & Programs

Requested Topic	Title of Paper	Author	School
Can the AF Support	USNORTHCOM from Crisis to Consequence	Christopher	
Designation as	Management: In Support of Whom?	F. Carper	
Defense			ACSC
Coordinating Officer			ACSC
in Disaster Recovery			
Operations?			
Civil Support	USNORTHCOM from Crisis to Consequence	Christopher	ACSC
Oversight?	Management: In Support of Whom?	F. Carper	ACSC
Civil Support vs	USNORTHCOM from Crisis to Consequence	Christopher	ACSC
Military Readiness	Management: In Support of Whom?	F. Carper	ACSC
Preemption Strategy	Defeating the United States with Radiological Weapons	Julian M.	ACSC
	in Fourth Generation Warfare	Chesnutt	ACSC
Law of Space	Finding the Middle Ground: The US Air Force, Space	Brian C.	ACSC
_	Weaponization, and Arms Control	Ruhm	ACSC

# HQ AF Warfighting Integration

Requested Topic	Title of Paper	Author	School
Data Fusion	Remembering the Future of Centralized Control-	Patrick J.	AFF
	Decentralized Execution	Sheets	АГГ
Defense Contracting	Lead Warfighters and Innovations: Collaborative	Sean M.	ACSC
and Acquisition	Methods of Filling Capability Gaps	Frisbee	ACSC
ISR Fusion	Laying the Space Control Foundation: Integrated Space	Christopher	ACSC
	Situational Awareness	J. Jackson	ACSC

Requested Topic	Title of Paper	Author	School
USAF Need for	Remotley Piloted Vehicles: The Next Stratofortress	Charles T.	ACSC
UAVs		Hamilton	ACSC

# HQ Civil Air Patrol

Requested Topic	Title of Paper	Author	School
Business Rules—	Finding the Middle Ground: The US Air Force, Space	Brian C.	
Enterprise Level	Weaponization, and Arms Control	Ruhm	ACSC
Depot			

#### INSS USAF

Requested Topic	Title of Paper	Author	School
Air and Space Issues and Planning (3.1-3.2)	The Role of Non-Lethal Airpower in Future Peace Operations: "Beyond Bombs on Target"	Regan Elder	ACSC
	Remotley Piloted Vehicles: The Next Stratofortress	Charles T. Hamilton	ACSC
Air and Space Issues and Planning (3.10-3.19)	Non-coercive Airpower: An Indictment of Incrementalism	Brad Bredenkamp	ACSC
	Spacepower as a Coercive Force	Robert D. Newberry	AWC
	Lead Warfighters and Innovations: Collaborative Methods of Filling Capability Gaps	Sean M. Frisbee	ACSC
Air and Space Issues and Planning (3.20-3.25)	Proposed Tenets of Space Power: Six Enduring Truths	Samuel L. McNiel	ACSC
	Building a Cadre of Space Professionals with Responsive Lift	Timothy Lawrence	ACSC
	Military Instruments of National Power	Brian E. Fredriksson	SAASS
	The International Development of Space and its Impact on U.S. National Space Policy	Dale L. Hayden	AFF
	The Decision Maker's Guide to Robust, Reliable and Inexpensive Access to Space	Gary N. Henry	AWC
	The Decision Maker's Guide to Robust, Reliable and Inexpensive Access to Space	Gary N. Henry	AWC
Air and Space Issues and Planning (3.26-3.29)	The Power Behind Spacepower	Stanford K. Kekauoha	SAASS
	Finding the Middle Ground: The US Air Force, Space Weaponization, and Arms Control	Brian C. Ruhm	ACSC
Air and Space Issues and Planning (3.3-3.5)	Finding the Middle Ground: The US Air Force, Space Weaponization, and Arms Control	Brian C. Ruhm	ACSC
	Centralized Command—Decentralized Execution: Implications of Operating in a Network Centric Warfare Environment	Richard M. Gomez	AWC
	Laying the Space Control Foundation: Integrated Space Situational Awareness	Christopher J. Jackson	ACSC
	Centralized Control with Decentralized Execution: Never	Daniel F.	AFF

Requested Topic	Title of Paper	Author	School
	Divide the Fleet?	Baltrusaitis	
Air and Space Issues and Planning (DAL) (3A.1-3A.5)	What to Expect of the Millennial Generation	Cori A. Culver	ACSC
	Ethical Leadership in a Cross-Generational Environment: The Chaplain as Ethical Leader and Advisor on Ethics	Bruce Glover	ACSC
Air and Space Issues and Planning (DAL) (3A.9-3A.12)	Air Force Leadership Development: Transformation's Constant	James S. Browne	AFF
	Laying the Space Control Foundation: Integrated Space Situational Awareness	Christopher J. Jackson	ACSC
	Critical Analysis of USAF Weight and Body Fat Management Program	Daniel Merry	ACSC
Arms Control and Strategic Security (1.1-1.6)	Operation OPERA: Lessons in the Use of Air and Space to Preempt a Nuclear Program	Clifford Stansell	ACSC
	Can We Deter Terrorists from Employing Weapons of Mass Destruction on the U.S. Homeland?	Daniel Ciechanows	AFF
	Russia's Great Power Security Relationship with the United States	Samuel B. Vandiver	ACSC
	The Clash of Cultures	Scott Chowning	ACSC
	Defeating the United States with Radiological Weapons in Fourth Generation Warfare	Julian M. Chesnutt	ACSC
Arms Control and Strategic Security (1.7-1.14)	Russia's Great Power Security Relationship with the United States	Samuel B. Vandiver	ACSC
Cases in Regional Security and Emerging National Security Issues (5.1-5.7)	U.S. Foreign Policy Toward Cuba in an Evolving Post- Castro Era	Kenneth C. Coons	AFF
	The Key to Stability on the Korean Peninsula—United States, Japan and China	Douglas J. Hine	AFF
	U.S. Policy in Post-Saddam Iraq	Eric S. Mathewson	AFF
	Non-coercive Airpower: An Indictment of Incrementalism	Brad Bredenkamp	ACSC
Cases in Regional Security and Emerging National Security Issues (5.16-5.23)	Defeating the United States with Radiological Weapons in Fourth Generation Warfare	Julian M. Chesnutt	ACSC
	The Matador's Dance: Engaging the US in Fourth Generation Warfare	Mark Murphy	ACSC
Cases in Regional Security and Emerging National Security Issues (5.23-5.29)	India as a Responsible Nuclear Power: A Strategy for Stability	Govind, PNR	AWC
	The Clash Of Cultures	Scott Chowning	ACSC

Requested Topic	Title of Paper	Author	School
	Defeating the United States with Radiological Weapons	Julian M.	ACSC
	in Fourth Generation Warfare	Chesnutt	ACSC
Cases in Regional	NATO Transformation: Beyond the Prague Summit	Bradley A.	
Security and	Initiatives	Seipel	
Emerging National			AFF
Security Issues			
(5.30-5.36)			
Cases in Regional	The 2002 U.S. National Security Strategy: A New Use-	Arnel B.	
Security and	of-Force Doctrine?	Enriquez	
Emerging National		•	AWC
Security Issues			
(5.37-5.40)			
Cases in Regional	Trans-Atlantic Collective Security in Light of the "War	Robert A.	
Security and	on Terrorism" and the War on Iraq	Hopkins	
Emerging National	and the state of t	P	AFF
Security Issues			
(5.8-5.15)			
	Victory by Accident: An Assessment of the Political and	Michael D.	AFE
	Military Dimensions in Kosovo	Phillips	AFF
	Answering Al-Qaeda: The Battle for Hearts and Minds in	Mary E.	A EE
	the Middle East	Whisenhunt	AFF
	American Propaganda	John	1 000
	1 8	Sweeney	ACSC
	Non-coercive Airpower: An Indictment of	Brad	A CCC
	Incrementalism	Bredenkamp	ACSC
	Non-coercive Airpower: An Indictment of	Brad	A CCC
	Incrementalism	Bredenkamp	ACSC
	Russia's Great Power Security Relationship with the	Samuel B.	A CCC
	United States	Vandiver	ACSC
Counterproliferation,	Redefining the Role on the National Guard Through	Bryan	
Force Protection,	Homeland Security: Defending America Against the	Witeof	A CCC
and Homeland	Asymmetric Threat of the 21st Century		ACSC
Security (2.15-2.21)	·		
	The Interagency Process and America's Second Front in	Michelle	ACSC
	the Global War on Terrorism	Clays	ACSC
Counterproliferation,	The Interagency Process and America's Second Front in	Michelle	
Force Protection,	the Global War on Terrorism	Clays	ACSC
and Homeland			ACSC
Security (2.22-2.29)			
	Canada and the United States—Defense Cooperation in	David B.	AWC
	U.S. Northern Command?	Millar	AWC
Information	The Clash of Cultures	Scott	
Operations and		Chowning	
Warfare			ACSC
(Operations)			
(4.14-4.17)			
Information	Anatomy of Cyberterrorism: Is America Vulnerable?	Bradley K.	
Operations and		Ashley	
Warfare			AWC
(Organizational)			
(4.1-4.5)			

Requested Topic	Title of Paper	Author	School
Information Operations and Warfare (Organizational) (4.18-4.23)	Anatomy of Cyberterrorism: Is America Vulnerable?	Bradley K. Ashley	AWC
Information Operations and Warfare (Organizational) (4.24-4.26)	American Propaganda	John Sweeney	ACSC
Information Operations and Warfare (Organizational) (4.27-4.32)	Anatomy of Cyberterrorism: Is America Vulnerable?	Bradley K. Ashley	AWC
Information Operations and Warfare (Organizational) (4.6-4.9)	Computer Network Defense: DOD and the National Response	James M. Jenkins	AWC
	Anatomy of Cyberterrorism: Is America Vulnerable?	Bradley K. Ashley	AWC

# Joint Chiefs of Staff

Requested Topic	Title of Paper	Author	School
DoD's Role in	Helping Hand—The Border Duress Call: Military	Greg A.	
Combating	Assistance to Federal Agencies in the Aftermath of	Haase	AFF
Terrorism within the	September 11, 2001		АГГ
United States.			
	Homeland Defense: At Risk as a Result of Civil Support?	Tonja M.	AFF
		Brickhouse	АГГ
	The Interagency Process and America's Second Front in	Michelle	ACSC
	the Global War on Terrorism	Clays	ACSC
	Redefining the Role on the National Guard Through	Bryan	
	Homeland Security: Defending America Against the	Witeof	ACSC
	Asymmetric Threat of the 21st Century		
How Does the Joint	Air Force Space Education: Transforming for Joint	Scott W.	
Force CDR	Operations	Beidleman	ACSC
Integrate Space Ops			ACSC
into His Operation?			

# Pacific Air Forces

Requested Topic	Title of Paper	Author	School
Logistics and the	The Importance of In-transit Visibility on U.S. Military	Anthony	
Warfighter: Making	Logistics	Butera	ACSC
the Mission Happen			

#### US Air Force in Europe

Requested Topic	Title of Paper	Author	School
Analysis and	The International Criminal Court: A Case of the United	Steven D.	
Challenges in	States Having Its Cake and Eating It	Dubriske	
Developing a			
Multinational,			ACSC
Interoperable Patient			ACSC
Movement Request			
(PMR) Reporting			
System			
Joint Battlespace	AOC Weapons System: Is the Concept Viable for the	Parker W.	
Information	21 st century	Northrup	
Management for the		III	SAASS
Air Operations			
Center			
Readiness in the	Does the Air Force Total Force Chaplain Service's Map	David E.	AWC
Chaplain Service	Match the Current Terrain?	Markwalder	AWC

#### **US Central Command**

Requested Topic	Title of Paper	Author	School
Compare the	Ammo for the Long Haul: The Sufficiency of Policy for	Stephen	
Effectiveness of	Munitions Resupply within the Expeditionary Air Force	Petters	
Mortar Indirect Fire	Construct		
Support and			ACSC
Precision Guided			ACSC
Munitions (PGM)			
Fire Support to			
Close Air			
Employment of	Unmanned Combat Aerial Vehicles: A Close Air Support	Michael L.	
UAVs in a Close Air	Alternative	Bartley	AWC
Support Role.			
Given the	Resource Allocation: The Department of Defense's	Gary W.	
Goldwater-Nichols	Achielle's Heel	Holland	
Act, How can the			AFF
CINC Best Influence			
the PPBS?			
	Given the Goldwater Nichols Act, How can Combatant	Anthony C.	AWC
	Commanders Influence the PPBS	Thompson	AWC

Requested Topic	Title of Paper	Author	School
Strategic	Strategic Surprise in an Age of Information Superiority:	Michael D.	
Implications of the	Is It Still Possible?	Brice	
Commercialization			
of Communications			AWC
in Achieving			
Information			
Superiority			
The Role of	Beyond Precision: Issues of Morality and Decision	Dwight A.	
Airpower in	Making in Minimizing Collateral Casualties	Roblyer	AFF
Counterterrorism			АГГ
Operations			

# US European Command

Requested Topic	Title of Paper	Author	School
Leadership	Non-Coercive Airpower: An Indictment of	Brad	
Accountability in	Incrementalism	Bredenkam	
Force Health			ACSC
Protection: General			
Slim's Ghost			

#### **US Joint Forces**

Requested Topic	Title of Paper	Author	School
Planning and	Assessing Effects-based Operations Crucial Component	Thomas J.	
Executing Tasks	Commander	Timmerman	
from the Effects			ACSC
Tasking Order			
(ETO)			
	Implementing Effects-Based Operations: Redefining the	James G.	AWC
	Role of the JTCB	Welton	AWC

# **US Special Operations Command**

Requested Topic	Title of Paper	Author	School
Integrating SOF and	Small Wars in a Big Theater: Special Operations Air	William P.	
Airpower in	Component Integration with Component in Theater	West	SAASS
Afghanistan and	Operations the Joint Air		SAASS
Beyond			
	The International Criminal Court: A Case of the United	Steven D.	ACSC
	States Having Its Cake and Eating It	Dubriske	ACSC

# US Strategic Command

Requested Topic	Title of Paper	Author	School
Weaponization of	Finding the Middle Ground: The US Air Force, Space	Brian C.	ACSC
Space	Weaponization, and Arms Control	Ruhm	ACSC

# **Other Papers of Note**

# **Air Command & Staff College**

Title of Paper	Author	School
Just War Theory: Perspectives from the Three Different Christianities	Carl Standifer	ACSC
The Canadian Operational Fighter Pilot Production Absorption Dilemma	Hebert Paul Kissmann	ACSC
Non-lethal Chemical Weapons	Lester A. Weilacher	ACSC
Humanitarian Intervention: The Changing Nature of Sovereignty	Stephen R. Steiner	ACSC
The Modernization of the Bundeswehr: A New Trend in Germany's Security Policy	Matthias Goedecke	ACSC
Contractors on the Battlefield: The Moral Dilemma	Deborah Meserve	ACSC
Space Environment Anomaly Sensors	Steven Cahanin	ACSC
Contractor's on the Battlefield: Five Problem Areas for Commanders	Marc Piccolo	ACSC
War in El Salvador: The Policies of President Reagan and Lessons Learned for Today	Robert Benning	ACSC
Aircraft Accident Boards: A Crash Course for Commanders	Bradley Pickens	ACSC
The Southern Philippines: Crossroad of U.S. Strategy on the Pacific	Craig Gaddis	ACSC
The Battle of Kasserine Pass: An Examination of Allied Operational Failings	Vince Carr	ACSC
Reach Forward in Time: Relevant Issues from WWII for Grooming Today's Operational	Douglas A. Cox	ACSC
Assessing Air Refueling Identifying Methods for Improving Operations	John G. Payne	ACSC
Joint Civil Engineer Possibilities: Air and Space Expeditionary Force Applications	Edwin H. Oshiba	ACSC
The Stryker Brigade: The Army's Template for Peace Operations	James Burns	ACSC
Advanced Military Technologies and the Morality of Modern Warfare	Kenneth Lang	ACSC
Of Humans, Technology, and Theories: A Tale of Two Billys	David Bobb	ACSC
From First to Wurst: An Examination of the Erosion and Implosion of German Technology During World War II	C. Pryor	ACSC
A New Flexible Global Positioning System (GPS) Constellation Sustainment Strategy	David Goldstein	ACSC
Achieving Psychological Effects via Airpower	Kevin Masterson	ACSC

Title of Paper	Author	School
Defining Southeast Asia's Defense Posture Amidst Challenging Times	Pak-Chuen Chin	ACSC
Medical Supply Platoons (Aviation) in World War II: A Proud Tradition of "Whatever It Takes"	Randall M. Ashmore	ACSC
Duty Status Handbook for the Air National Guard	Mary Burrus	ACSC
Basic Training of Non-prior Service Personnel in the Reserve Component	Steven Sinclair	ACSC
JSF: The Stovl Option Package	James M. Blackburn	ACSC
DMPI-Miles/Day: A Measure of Combat Capability	Patrick Tom	ACSC
The Information Instrument of Power: Ubiquitous Traits Demonstrated in Ira 1990 to 2003	William Martin	ACSC
Effect-based Airlift	Lenny Richoux	ACSC

#### **Air Force Fellows**

Title of Paper	Author	School
Transformation Dilemma: Air Force Special Operations Command and the Role in the Future of the Air Force and Special Operations	Michael J. Kingsley	AFF
On Target?—Seeking Morality in Air Force Operations	James A. Foley	AFF
Canadian Decisions in a Shifting North American Security Landscape	Bruce A. Johnson	AFF
Proliferation of Russian Military Equipment: Implications for United States Air and Space	Steven L. Kwast	AFF
Achieving Follow-through: The Role of American Grand Strategy in the Transition from Conflict to Peace	James R. Marrs	AFF
The Failure of American Policy Towards Iraq Post-operation Desert Storm	Mark S. McAlpine	AFF
ICBMS—Their Relevance to U.S. Security and the United States Air Force in the 21st	Joseph J. Pridotkas	AFF
Building Better Leaders: Developing Air Force Squadron Leadership for the Next Century	Billy R. Shrader	AFF
Building Better Leaders: Developing Air Force Squadron Leadership for the Next Century	Timothy M. Zadalis	AFF

# Air War College

Title of Paper	Author	School
Emerging Concepts of Mortuary Affairs Doctrine for the 21st Century War Fighter	Frederic C. Ryder	AWC
Beyond the Task Force CONOPS: The Path to a Capabilities-based Modernization	James Planeaux	AWC

Title of Paper	Author	School
Going Deep: A System Concept for Detecting Deeply Buried Facilities from Space	Arnold H. Streland	AWC
Bare Base Equipment and Support of the Expeditionary Air Force	Vic Wager III	AWC
Global Reach Laydown from Desert Shield to Enduring Freedom: A Comparative Analysis	Phil Bossert	AWC
Hispanics: An Untapped Leadership Resource	Lisa C. Firmin	AWC
Building the Rule of Law: U.S. Assistance Programs and Police/Military Relations in Latin	Joel F. Cassman	AWC
Base Realignment and Closure (BRAC): Are We Right-sized?	Harry Briesmaster III	AWC
Why a PHD in Maintenance?	Charles L. Webb III	AWC
The Air Superiority Fighter and Defense Transformation: Why DOD Requirements Demand the F/A-22 Raptor	Devin L. Cate	AWC
Opening the Aperture: Ending Service "Branding" of U.S. Unified Commands	Russell J. Handy	AWC
Security Assistance Dependence—Wielding American Power	Brian K. Hall	AWC

# **School for Advanced Air & Space Studies**

Title of Paper	Author	School
Coercive Complementarity: Synergies in the Economic and Military Instruments of National Power	Harry A. Foster	SAASS
Coordinate Guided Weapons in Close Air Support: An Evaluation of Risk	Jeffrey B. Taliaferro	SAASS
The 12th USAF: Tactical and Operational Innovations in the Mediterranean Theater of Operations, 1943-44	Matthew G. St. Clair	SAASS
Responding to the Mobile Missile Threat: Developing an Architecture for Joint Attack	Robert W. Stanley, II	SAASS
The Next Long Range Precision Strike Weapon System—An Analysis of Options and Capabilities	Lynn I. Scheel	SAASS
Anti-access Threat and Theater Air Bases in the Pacific Rim	William E. Pinter	SAASS
Airpower in the Grid-Box: Fire Support Coordination and Deconfliction in the Future	John W. Pearse	SAASS
The Ethical and Moral Implications of Precision-Guided Munitions	Scott F. Murrary	SAASS
Stop Riding the Waves: A Strategic Plan for the USAF Pilot Force	Charles E. Metrolis, Jr.	SAASS
SMART Tankers	Martin R. Hertz	SAASS

Title of Paper	Author	School
The Five Air Battles that Changed the Development of Airpower	Michael F. B. Fleck	SAASS
A Theory of Regime Change	David T. Fahrenkrug	SAASS
General O. P. Weyland and CAS in Korea: An Airman's Perspective	Michael J. Chandler	SAASS
Crony Attack: Strategic Attack's Silver Bullet?	Julian H. Tolbert	SAASS
Close Support: Shaping the Battlefield for the Objective Force Maneuver Commander	David A. Lee	SAASS

Home for student research studies from the graduate schools of the Air Force

https://research.maxwell.af.mil http://research.maxwell.af.smil.mil http://research.airuniv.edu

•Books and Papers •Research Summaries •Research Topics •Bulletins •Ongoing Student Projects